

RANDOM KNOWLEDGE, VOL XI



Matilda Betham

LECTURE I: THE IDEA OF PROGRESS

Project Gutenberg's *Christianity and Progress*, by Harry Emerson Fosdick

I

The supposition that fish do not recognize the existence of water nor birds the existence of air often has been used to illustrate the insensitive unawareness of which we all are capable in the presence of some encompassing medium of our lives. The illustration aptly fits the minds of multitudes in this generation, who live, as we all do, in the atmosphere of progressive hopes and yet are not intelligently aware of it nor conscious of its newness, its strangeness and its penetrating influence. We read as a matter of course such characteristic lines as these from Tennyson:

"Yet I doubt not thro' the ages one increasing purpose runs,
And the thoughts of men are widen'd with the process of the suns."

Such lines, however, are not to be taken as a matter of course; until comparatively recent generations such an idea as that never had dawned on anybody's mind, and the story of the achievement of that progressive interpretation of history is one of the most fascinating narratives in the long record of man's mental Odyssey. In particular, the Christian who desires to understand the influences, both intellectual and practical, which are playing with transforming power upon Christianity today, upon its doctrines, its purposes, its institutions, and its social applications, must first of all understand the idea of progress. For like a changed climate, which in time alters the fauna and flora of a continent beyond the power of human conservatism to resist, this progressive conception of life is affecting every thought and purpose of man, and no attempted segregation of religion from its influence is likely to succeed.

The significance of this judgment becomes the more clear when we note the fact that the idea of progress in our modern sense is not to be found before the sixteenth century. Men before that time had lived without progressive hopes just as before Copernicus they had lived upon a stationary earth. Man's life was not thought of as a growth; gradual change for the better was not supposed to be God's method with mankind; the future was not conceived in terms of possible progress; and man's estate on earth was not looked upon as capable of indefinite perfectibility. All these ideas, so familiar to us, were undreamed of in the ancient and medieval world. The new astronomy is not a more complete break from the old geocentric system with its stationary earth than is our modern progressive way of thinking from our fathers' static conception of human life and history.

II

It will be worth our while at the beginning of our study to review in outline this development of the idea of progress, that we may better understand the reasons for its emergence and may more truly estimate its revolutionary effects. In the ancient world the Greeks, with all their far-flung speculations, never hit upon the idea of progress. To be sure, clear intimations, scattered here and there in Greek literature, indicate faith that man in the past had improved his lot. Aeschylus saw men lifted from their hazardous lives in sunless caves by the intervention of Prometheus and his sacrificial teaching of the arts of peace; Euripides contrasted the primitive barbarism in which man began with the civilized estate which in Greece he had achieved--but this perceived advance never was erected into a progressive idea of human life as a whole. Rather, the original barbarism, from which the arts of civilization had for a

little lifted men, was itself a degeneration from a previous ideal estate, and human history as a whole was a cyclic and repetitious story of never-ending rise and fall. Plato's philosophy of history was typical: the course of cosmic life is divided into cycles, each seventy-two thousand solar years in length; during the first half of each cycle, when creation newly comes from the hands of Deity, mankind's estate is happily ideal, but then decay begins and each cycle's latter half sinks from bad to worse until Deity once more must take a hand and make all things new again. Indeed, so far from reaching the idea of progress, the ancient Greeks at the very center of their thinking were incapacitated for such an achievement by their suspiciousness of change. They were artists and to them the perfect was finished, like the Parthenon, and therefore was incapable of being improved by change. Change, so far from meaning, as it does with us, the possibility of betterment, meant with them the certainty of decay; no changes upon earth in the long run were good; all change was the sure sign that the period of degeneration had set in from which only divine intervention could redeem mankind. Paul on Mars Hill quoted the Greek poet Aratus concerning the sonship of all mankind to God, but Aratus's philosophy of history is not so pleasantly quotable:

"How base a progeny sprang from golden sires!
And viler shall they be whom ye beget." [1]

Such, in general, was the non-progressive outlook of the ancient Greeks.

Nor did the Romans hit upon the idea of progress in any form remotely approaching our modern meaning. The casual reader, to be sure, will find occasional flares of expectancy about the future or of pride in the advance of the past which at first suggest progressive interpretations of history. So Seneca, rejoicing because he thought he knew the explanation of the moon's eclipses, wrote: "The days will come when those things which now lie hidden time and human diligence will bring to light. . . . The days will come when our posterity will marvel that we were ignorant of truths so obvious." [2] So, too, the Epicureans, like the Greek tragedians before them, believed that human knowledge and effort had lifted mankind out of primitive barbarism and Lucretius described how man by the development of agriculture and navigation, the building of cities and the establishment of laws, the manufacture of physical conveniences and the creation of artistic beauty, had risen, "gradually progressing," to his present height.[3] Such hopeful changes in the past, however, were not the prophecies of continuous advance; they were but incidental fluctuations in a historic process which knew no progress as a whole. Even the Stoics saw in history only a recurrent rise and fall in endless repetition so that all apparent change for good or evil was but the influx or the ebbing of the tide in an essentially unchanging sea. The words of Marcus Aurelius are typical: "The periodic movements of the universe are the same, up and down from age to age"; "He who has seen present things has seen all, both everything which has taken place from

all eternity and everything which will be for time without end; for all are of one kin and of one form"; "He who is forty years old, if he has any understanding at all, has, by virtue of the uniformity that prevails, seen all things which have been and all that will be." [4]

When with these Greek and Roman ideas the Hebrew-Christian influences blended, no conception of progress in the modern sense was added by the Church's contribution. To be sure, the Christians' uncompromising faith in personality as the object of divine redemption and their vigorous hope about the future of God's people in the next world, if not in this, calcined some elements in the classical tradition. Belief in cycles, endlessly repeating themselves through cosmic ages, went by the board. This earth became the theatre of a unique experiment made once for all; in place of the ebb and flow of tides in a changeless sea, mankind's story became a drama moving toward a climactic denouement that would shake heaven and earth together in a divine cataclysm. But this consummation of all history was not a goal progressively to be achieved; it was a divine invasion of the world expectantly to be awaited, when the victorious Christ would return and the Day of Judgment dawn.

The development of this apocalyptic phrasing of hope has been traced too often to require long rehearsal here. If the Greeks were essentially philosophers and welcomed congenially ideas like endless cosmic cycles, the Hebrews were essentially practical and dramatic in their thinking and they welcomed a picture of God's victory capable of being visualized by the imagination. At first their national hopes had been set on the restoration of the Davidic kingdom; then the Davidic king himself had grown in their imagination until, as Messiah in a proper sense, he gathered to himself supernal attributes; then, as a child of their desperate national circumstances, the hope was born of their Messiah's sudden coming on the clouds of heaven for their help. Between the Testaments this expectation expanded and robed itself with pomp and glory, so that when the Christians came they found awaiting them a phrasing of hope which they accepted to body forth their certainty of God's coming sovereignty over all the earth. This expectation of coming triumph was not progressive; it was cataclysmic. It did not offer the prospect of great gains to be worked for over long periods of time; it offered a divine invasion of history immediately at hand. It was pictured, not in terms of human betterment to be achieved, but of divine action to be awaited. The victory would suddenly come like the flood in Noah's day, like the lightning flashing from one end of the heaven to the other, like a thief in the night.

To be sure, this eager expectation of a heavenly kingdom immediately to arrive on earth soon grew dim among the Christians, and the reasons are obvious. For one thing, the Church herself, moving out from days of hardship to days of preferment and prosperity, began to allure with her inviting prospects of growing power the enthusiasms and hopes of the people, until not the suddenly appearing kingdom from the heavens, but

the expanding Church on earth became the center of Christian interest. For another thing, Christ meant more to Christians than the inaugurator of a postponed kingdom which, long awaited with ardent expectation, still did not arrive; Christ was the giver of eternal life now. More and more the emphasis shifted from what Christ would do for his people when he came upon the clouds of heaven to what he was doing for them through his spiritual presence with them. Even in the Fourth Gospel one finds this good news that Christ had already come again in the hearts of his people insisted on in evident contrast with the apocalyptic hope literally conceived. For another thing, dramatic hopes of a sudden invasion of the world are always the offspring of desperate conditions. Only when people are hard put to it do they want history catastrophically stopped in the midst of its course. The Book of Daniel must be explained by the tyrannies of Antiochus Epiphanes, the Book of Revelation by the persecutions of Domitian, the present recrudescence of pre-millennialism by the tragedy of the Great War. But when the persecution of the Church by the State gave way to the running of the State by the Church; when to be a Christian was no longer a road to the lions but the sine qua non of preferment and power; when the souls under the altar ceased crying, "How long, O Master, the holy and true, dost thou not judge and avenge our blood on them that dwell on the earth?" then the apocalyptic hopes grew dim and the old desire for a kingdom immediately to come was subdued to an expectation, no longer imperative and urgent, that sometime the course of history would stop on Judgment Day.

In all these Greek and Roman, Hebrew and Christian contributions, which flowed together and then flowed out into the medieval age, there was no suggestion of a modern idea of progress, and in the medieval age itself there was nothing to create a fresh phrasing of expectancy. Men were aware of the darkness of the days that had fallen on the earth; even when they began to rouse themselves from their lethargy, their thoughts of greatness did not reach forward toward a golden age ahead but harked back

"To the glory that was Greece
And the grandeur that was Rome,"

and their intellectual life, instead of being an adventurous search for new truth, was a laborious endeavour to stabilize the truth already formulated in the great days of the early Church. Indeed, the Church's specific contribution of a vividly imagined faith in a future world, as the goal of the most absorbing hopes and fears of men, tended rather to confirm than to dissipate the static conception of earthly life and history. With an urgency that the ancient world had never known the Christian world believed in immortality and visualized the circumstances of the life to come so concretely that in a medieval catechism the lurid colour of the setting sun was ascribed to the supposition that "he looketh down upon hell." [5] Nothing in this life had any importance save as it prepared the souls of men for life to come. Even Roger Bacon, his mind flashing like a beacon from below the sky-line of the modern

world, was sure that all man's knowledge of nature was useful only in preparing his soul to await the coming of Antichrist and the Day of Judgment. There was no idea of progress, then, in the medieval age. Human life and history were static and the only change to be anticipated was the climactic event

"When earth breaks up and heaven expands."

III

The emergence of modern progressive hopes out of this static medievalism is one of the epic occurrences of history. The causes which furthered the movement seem now in retrospect to be woven into a fabric so tightly meshed as to resist unraveling. Nevertheless, it is not difficult to see at least some of the major factors which furthered this revolutionary change from a static to a progressive world.

Among the first, scientific invention is surely to be noted. Even Roger Bacon, prophesying with clairvoyant insight far in advance of the event, foresaw one of the determining factors of the modern age: "Machines for navigating can be made so that without rowers great ships can be guided by one pilot on river or sea more swiftly than if they were full of oarsmen. Likewise vehicles are possible which without draught-animals can be propelled with incredible speed, like the scythed chariots, as we picture them, in which antiquity fought. Likewise a flying machine is possible in the middle of which a man may sit, using some ingenious device by which artificial wings will beat the air like those of a flying bird. Also machines, small in size, can be constructed to lift and move unlimited weights, than which in an emergency nothing is more useful." [6] So dreamed the great friar in the thirteenth century. When, then, we find the minds of men first throwing off their intellectual vassalage to antiquity and beginning to believe in themselves, their present powers and their future prospects, it is this new-found mastery over nature's latent resources which is the spring and fountain of their confidence. Cardan, in the sixteenth century, marveling at the then modern inventions of the compass, the printing press, and gunpowder, cried, "All antiquity has nothing comparable to these three things." [7] Every year from that day to this has deepened the impression made upon the minds of men by the marvelous prospect of harnessing the resources of the universe. The last one hundred and twenty-five years have seen the invention of the locomotive, the steamship, the telegraph, the sewing machine, the camera, the telephone, the gasoline engine, wireless telegraphy and telephony, and the many other applications of electricity. As one by one new areas of power have thus come under the control of man, with every conquest suggesting many more not yet achieved but brought within range of possibility, old theories of cosmic degeneration and circular futility have gone to pieces, the glamour of antiquity has lost its allurements, the great days of humanity upon the earth have been projected into the

future, and the gradual achievement of human progress has become the hope of man.

Another element in the emergence of the modern progressive outlook upon life is immediately consequent upon the first: world-wide discovery, exploration and intercommunication. Great as the practical results have been which trace their source to the adventurers who, from Columbus down, pioneered unknown seas to unknown lands, the psychological effects have been greater still. Who could longer live cooped up in a static world, when the old barriers were so being overpassed and new continents were inviting adventure, settlement, and social experiment hitherto untried? The theological progressiveness of the Pilgrim Fathers, starting out from Leyden for a new world, was not primarily a matter of speculation; it was even more a matter of an adventurous spirit, which, once admitted into life, could not be kept out of religious thought as well. In Edward Winslow's account of Pastor Robinson's last sermon before the little company of pioneers left Leyden, we read that Robinson "took occasion also miserably to bewaile the state and condition of the Reformed Churches, who were come to a period in Religion, and would goe no further than the instruments of their Reformation: As for example, the _Lutherans_ they could not be drawne to goe beyond what _Luther_ saw, for whatever part of God's will he had further imparted and revealed to _Calvin_, they will die rather than embrace it. And so also, saith he, you see the _Calvinists_, they stick where he left them: a misery much to bee lamented; For though they were precious shining lights in their times, yet God hath not revealed his whole will to them: And were they now living, saith hee, they would bee as ready and willing to embrace further light, as that they had received." [8] Static methods of thinking are here evidently going to pieces before the impact of a distinctly unstatic world. They were looking for "more truth and light yet to breake forth out of his holy Word" [9] because they lived in a time when new things had been happening at an exhilarating rate and when pioneering adventure and general travel in a world of open avenues were already beginning to have that liberating effect which has increased with every passing century.

Closely allied with the two elements already noted is a third: the increase of knowledge, which, as in the case of astronomy, threw discredit upon the superior claims of antiquity and made modern men seem wiser than their sires. For ages the conviction had held the ground that the ancients were the wisest men who ever lived and that we, their children, were but infants in comparison. When, therefore, the Copernican astronomy proved true, when the first terrific shock of it had passed through resultant anger into wonder and from wonder into stupefied acceptance, and from that at last into amazed exultation at the vast, new universe unveiled, the credit of antiquity received a stunning blow. So far was Aristotle from being "the master of those who know" whom the medievalists had revered, that he had not even known the shape and motion of the earth or its relation with the sun. For the first time in history

the idea emerged that humanity accumulates knowledge, that the ancients were the infants, that the moderns represent the age and wisdom of the race. Consider the significance of those words of Pascal in the seventeenth century: "Those whom we call ancient were really new in all things, and properly constituted the infancy of mankind; and as we have joined to their knowledge the experience of the centuries which have followed them, it is in ourselves that we should find this antiquity that we revere in others." [10] For the first time in history men turned their faces, in their search for knowledge, not backward but forward, and began to experience that attitude which with us is habitual--standing on tip-toe in eager expectancy, sure that tomorrow some new and unheard of truth will be revealed.

New inventions, new discoveries, new knowledge--even before the eighteenth century all these factors were under way. Then a new factor entered which has played a powerful part in substituting a progressive for a static world: new social hopes. The medieval age had no expectation of a better social life on earth. Charity was common but it was purely individual and remedial; it did not seek to understand or to cure the causes of social maladjustment; it was sustained by no expectation of better conditions among men; it was valued because of the giver's unselfishness rather than because of the recipient's gain, and in consequence it was for the most part unregulated alms-giving, piously motivated but inefficiently managed. In the eighteenth century a new outlook and hope emerged. If man could pioneer new lands, learn new truth and make new inventions, why could he not devise new social systems where human life would be freed from the miseries of misgovernment and oppression? With that question at last definitely rising, the long line of social reformers began which stretched from Abbé de Saint-Pierre to the latest believer in the possibility of a more decent and salutary social life for human-kind. The coming of democracy in government incalculably stimulated the influence of this social hope, for with the old static forms of absolute autocracy now broken up, with power in the hands of the people to seek as they would "life, liberty and the pursuit of happiness," who could put limits to the possibilities? The medieval age was gone; the modern age had come, and its distinctive note was progress, with new inventions, new discoveries, new knowledge and new social hope.

It would be a fascinating task to watch these interweaving factors at their work and to trace their commingled influence as slowly their involved significance became clear, now to this man and now to that. The best narrative that has been written yet of this epochal movement is contained in Professor Bury's volume on "The Idea of Progress." There one sees the stream of this progressive conception of life pushing its way out as through a delta by way of many minds, often far separated yet flowing with the same water. Some men attacked the ancients and by comparison praised the modern time as Perrault did with "The Age of Louis the Great"; some men foresaw so clearly the possibility of man's control

over nature that they dreamed of terrestrial Utopias as Francis Bacon did in "New Atlantis"; some men, like Descartes, sought to grasp the intellectual conditions of human improvement; and others, like Condorcet, became the fervid prophets of human perfectibility; some, like Turgot, re-examined history in terms of the new ideas; and some, like Saint Simon and Comte, sought to discover the law by which all progress moves. This new idea of life and history came "by divers portions and in divers manners," but no one can doubt its arrival. The life of man upon this earth was no longer conceived as static; it was progressive and the possibilities that lay ahead made all the achievements of the past seem like the play of childhood.

At last, in the nineteenth century, the climactic factor was added which gathered up all the rest and embraced them in a comprehensive philosophy of life. Evolution became a credible truth. No longer a dim conjecture, it was established in biology, and then it spread its influence out into every area of human thought until all history was conceived in genetic terms and all the sciences were founded upon the evolutionary idea. Growth became recognized as the fundamental law of life. Nothing in the universe without, or in man's life within, could longer be conceived as having sprung full-statured, like Minerva from the head of Jove. All things achieved maturity by gradual processes. The world itself had thus come into being, not artificially nailed together like a box, but growing like a tree, putting forth ever new branches and new leaves. When this idea had firmly grasped the human mind, the modern age had come indeed, and progress was its distinctive category of understanding and its exhilarating phrasing of human hope. Then came the days of mid-Victorian optimism with songs like this upon men's lips:

"Every tiger madness muzzled, every serpent passion kill'd,
Every grim ravine a garden, every blazing desert till'd,

"Robed in universal harvest up to either pole she smiles,
Universal ocean softly washing all her warless isles." [11]

IV

Any one, however, who has lived with discerning thought through the opening years of the twentieth century, must be aware that something has happened to chasten and subdue these wildly enthusiastic hopes of the mid-Victorian age. Others beside the "gloomy dean" of St. Paul's, whether through well-considered thought or through the psychological shock of the Great War, have come to look upon this rash, unmitigated enthusiasm about the earth's future as a fool's paradise. At any rate, no treatment of the idea of progress would be complete which did not dwell upon the limitations to that idea, now definitely obvious to thoughtful men.

As early as 1879, in Saporta's "Le Monde des Plantes," we run upon one serious setback to unqualified expectations of progress. Men began to take into account the fact that this earth is not a permanent affair.

"We recognize from this point of view as from others," wrote Saporta, "that the world was once young; then adolescent; that it has even passed the age of maturity; man has come late, when a beginning of physical decadence had struck the globe, his domain." [12] Here is a fact to give enthusiasm over earthly progress serious pause. This earth, once uninhabitable, will be uninhabitable again. If not by wholesale catastrophe, then by the slow wearing down of the sun's heat, already passed its climacteric, this planet, the transient theatre of the human drama, will be no longer the scene of man's activity, but as cold as the moon, or as hot as colliding stars in heaven, will be able to sustain human life no more. "The grandest material works of the human race," wrote Faye in 1884, "will have to be effaced by degrees under the action of a few physical forces which will survive man for a time. Nothing will remain, not even the ruins." [13]

Every suggested clew to a possible escape from the grimness of the planet's dissolution has been followed up with careful search. The discovery of radioactivity seemed to promise endlessly extended life to our sun, but Sir E. Rutherford, before the Royal Astronomical Society, has roundly denied that the discovery materially lengthens our estimate of the sun's tenure of life and has said that if the sun were made of uranium it would not because of that last five years the longer as a giver of heat.[14] Whether we will or not, we have no choice except to face the tremendous fact, calmly set down by von Hartmann in 1904: "The only question is whether . . . the world-process will work itself out slowly in prodigious lapse of time, according to purely physical laws; or whether it will find its end by means of some metaphysical resource when it has reached its culminating point. Only in the last case would its end coincide with the fulfilment of a purpose or object; in the first case, a long period of purposeless existence would follow after the culmination of life." [15]

In a word, men delighted at the prospect of human progress on this planet have made an idol of it, only to discover that on a transient earth it leads nowhere without God and immortality. One disciple of naturalism recently denied his desire to believe in God because he wanted a risky universe. But the universe without God is not risky; it is a foregone conclusion; the dice are all loaded. After the lapse of millions of years which, however long they be stretched out, will ultimately end, our solar system will be gone, without even a memory left of anything that ever was dreamed or done within it. That is the inevitable issue of such a "risky" universe. When scientifically-minded men, therefore, now take a long look ahead, the Utopian visions of the mid-Victorian age are not foremost in their thought. Rather, as one of them recently wrote:

"One is tempted to imagine this race of supermen, of some millions of years hence, grimly confronting the issue of extinction. Probably long before that time science will have perfectly mastered the problem of the sun's heat, and will be able to state precisely at what period the radiation will sink to a level which would normally be fatal to the living inhabitants of the planets. Then will begin the greatest of cosmic events: a drama that has doubtless been played numbers of times already on the stage of the universe: the last stand of the wonderful microcosm against the brute force of the macrocosm. . . .

"One conceives that our supermen will face the end philosophically. Death is losing its terrors. The race will genially say, as we individuals do to-day, that it has had a long run. But it will none-the-less make a grim fight. Life will be worth living, for everybody, long before that consummation is in sight. The hovering demon of cold and darkness will be combatted by scientific means of which we have not the germ of a conception." [16]

If ever a river ran out into a desert, the river of progressive hopes, fed only from springs of materialistic philosophy, has done so here. At least the Greeks had their immortality and the Hebrews their coming Kingdom of God, but a modern materialist, with all his talk of progress, has neither the one nor the other, nor anything to take their place as an ultimate for hope. Whatever else may be true, progress on a transient planet has not done away with the need of God and life eternal.

Moreover, not only have our twentieth century thought and experience seriously qualified the meaning of progress on this earth by the limiting of the earth's duration; men have come also to distrust, as a quite unjustified flourish of sentimentality, the mid-Victorian confidence in an automatic evolution which willy-nilly lifts humanity to higher levels. Said Herbert Spencer, "Progress is not an accident, not a thing within human control, but a beneficent necessity." "This advancement is due to the working of a universal law; . . . in virtue of that law it must continue until the state we call perfection is reached. . . . Thus the ultimate development of the ideal man is logically certain--as certain as any conclusion in which we place the most implicit faith; . . . so surely must the things we call evil and immorality disappear; so surely must man become perfect." [17] There is no scientific basis whatever for such a judgment. Evolution is not an escalator which, whether or not man run in addition to its lift, will inevitably raise humanity to a heaven on earth. Potatoes in the cellar shooting out long white eyes in search of light are evolving, but they are evolving worse. Upon the basis of a scientific doctrine of evolution, no idolatrous superstition could be much more lacking in intellectual support than Spencer's confidence in a universal, mechanical, irresistible movement toward perfection. The plain fact is that human history is a strange blend of progress and regress; it is the story of the rhythmic rise and fall of civilizations

and empires, of gains made only to be lost and lost only to be fought for once again. Even when advance has come, it has come by mingled progress and cataclysm as water passes, through gradual increase of warmth, from ice suddenly to liquid and from liquid suddenly to vapour. Our nineteenth century ideas of evolution tended to create in us the impression that humanity had made a smooth and even ascent. We artificially graded the ascending track of human history, leveled and macadamized it, and talked of inevitable progress. Such sentimental optimism has ceased even to be comforting, so utterly untenable has it become to every well-instructed mind.

To such unfounded faith in automatic progress a valuable counterweight is acquaintance with the life of a man like St. Augustine. As one reads Augustine's sermons one can hear in the background the collapse of a great civilization. One can tell from his discourses when the barbarians began to move on Rome. One can hear the crash when Alaric and his hordes sacked the Eternal City. One can catch the accent of horror at the tidal waves of anarchy that everywhere swept in to engulf the falling empire. "Horrible things," said Augustine, "have been told us. There have been ruins, and fires, and rapine, and murder, and torture. That is true; we have heard it many times; we have shuddered at all this disaster; we have often wept, and we have hardly been able to console ourselves." [18] At last, the empire in ruins, the old civilization tottering to its collapse, Augustine died in his episcopal city of Hippo, while the barbarians were hammering at the city gates. Through such scenes this generation too has lived and has had to learn again, what we never should have forgotten, that human history is not a smooth and well-rolled lawn of soft ascents; that it is mountainous, precipitous, terrific--a country where all progress must be won by dint of intelligence and toil, and where it is as easy to lose the gains of civilization as it is to fall over a cliff or to surrender a wheat field to the weeds. An archeologist in Mesopotamia talked with an Arab lad who neither read, himself, nor knew any one who did; yet the lad, when he acknowledged this, stood within a stone's throw of the site where milleniums ago was one of the greatest universities of the ancient world and where still, amid the desolation, one could dig and find the old clay tablets on which the children of that ancient time had learned to write. Progress? Regress! While history as a whole, from the Cro-Magnon man to the twentieth century, does certainly suggest a great ascent, it has not been an automatic levitation. It has been a fight, tragic and ceaseless, against destructive forces. This world needs something more than a soft gospel of inevitable progress. It needs salvation from its ignorance, its sin, its inefficiency, its apathy, its silly optimisms and its appalling carelessness.

V

Nevertheless, though it is true that our modern ideas of progress on this

earth never in themselves can supply an adequate philosophy of life, and though it is true that they do not dispense with, but rather emphasize, our need of God and immortality and the saving powers which Christians find in Christ, yet those ideas have in them a permanent contribution to the life of man from whose influence the race cannot escape. When we have granted the limitations which disillusioned thoughtfulness suggests concerning progress upon this earth, it still remains true that, in our new scientific control over the latent resources of the earth without and over our own mental and moral processes within, we have a machinery for producing change that opens up exciting prospects before humanity. Never in our outlook upon man's earthly future can we go back to the endless cosmic cycles of the Greeks or the apocalyptic expectations of the Hebrews. We are committed to the hope of making progress, and the central problem which Christianity faces in adjusting her thought and practice to the modern age is the problem of coming to intelligent terms with this dominant idea.

These lectures are an excursion to spy out this land and to see, if we may, what the idea of progress through the scientific control of life is likely to mean and ought to mean to Christianity. If this modern idea is not intelligently guided in its effect upon our faith and practice, it will none the less have its effect in haphazard, accidental, unguided, and probably ruinous ways. If one listens, for example, to the preaching of liberal ministers, one sees that every accent of their teaching has been affected by this prevalent and permeating thought. The God they preach no longer sits afar like Dante's deity in the stationary empyrean beyond all reach of change; their God is here in the midst of the human struggle, "their Captain in the well-fought fight." H. G. Wells may be a poor theologian but he is one of our best interpreters of popular thought and his idea of God, marching through the world "like fives and drums," calling the people to a progressive crusade for righteousness, is one which modern folk find it most easy to accept. He is a God of progress who undergirds our endeavours for justice in the earth with his power; who fights in and for and with us against the hosts of evil; whose presence is a guarantee of ultimate victory; and whose effect upon us is to send us out to war against ancient human curses, assured that what ought to be done can be done.

As men's thought of God has thus been molded by the idea of progress on the earth, so, too, the Christ they preach is not primarily, as of old, the victim by whose substitutionary sacrifice the race of men has found an open door from the bottomless pit of endless woe to a blessed immortality in Paradise. The modern emphasis is all another way. Christ is the divine revealer whose spirit alone can transform individuals and save society. The sort of character he was, the life he lived, the ideas he promulgated, are the salt that can preserve human life, the light that can illumine the way to a kingdom of righteousness on earth. He himself is the leader in the fight for that kingdom, his sacrifice part of the price it costs, his spirit the quality of life that is indispensable to

its coming, and when we think of him we sing,

"The Son of God goes forth to war. . . .
Who follows in his train?"

So, too, the Church, as presented by typical modern preachers, is no longer an ark to which, from the flood of wrath divine, the few may flee for safety. If men tried to preach in that way, the message would stick in their throats. The Church is primarily an instrument in God's hands to bring personal and social righteousness upon the earth. When her massed influence overcomes a public evil or establishes a public good, men find the justification of her existence and a first-rate weapon of apologetic argument in her behalf. When wars come, the Church is blamed because she did not prevent them; when wars are over, she takes counsel how she may prove the validity of her message by making their recurrence impossible; and the pitiful dismemberment of the Church by sects and schisms is hated and deplored, not so much because of economic waste or theological folly, as because these insane divisions prevent social effectiveness in bringing the message of Christ to bear influentially on modern life.

Likewise, hope, deeply affected by modern ideas of earthly progress, is not primarily post-mortem, as it used to be. Men believe in immortality, but it seems so naturally the continuance of this present life that their responsible concern is chiefly centered here. The hopes which waken immediate enthusiasm and stir spontaneous response are hopes of righteousness victorious upon the earth. Because men believe in God, they believe that he has great purposes for humankind. The course of human history is like a river: sometimes it flows so slowly that one would hardly know it moved at all; sometimes bends come in its channel so that one can hardly see in what direction it intends to go; sometimes there are back-eddies so that it seems to be retreating on itself. If a man has no spiritual interpretation of life, if he does not believe in God, he may well give up hope and conclude that the human river is flowing all awry or has altogether ceased to move. A Christian, however, has a spiritual interpretation of life. He knows that human history is a river--not a whirlpool, nor a pond, but a river flowing to its end. Just as, far inland, we can tell that the Hudson is flowing to the sea, because the waters, when the tide comes in, are tintured with the ocean's quality, so now, we believe that we can tell that the river of human history is flowing out toward the kingdom of our God. Already the setback of the divine ocean is felt among us in ideals of better life, personal, social, economic, national. That it is Christianity's function to believe in these ideals, to have faith in the possibility of their realization, to supply motives for their achievement, and to work for them with courage and sacrifice, is the familiar note of modern Christian hope.

The modern apologetic also is tinctured with this same quality. Not as of old is it a laboured working out of metaphysical propositions. Rather, a modern Christian preacher's defense of the Gospel may be paraphrased in some such strain as this: You never can achieve a decent human life upon this planet apart from the Christian Gospel. Neither outward economic comfort nor international treaties of peace can save the day for humanity. Not even when our present situation is described as "a race between education and catastrophe" has the case been adequately stated. What kind of education is meant? If every man and woman on earth were a Ph. D., would that solve the human problem? Aaron Burr had a far keener intellect than George Washington. So far as swiftness and agility of intelligence were concerned, Burr far out-distanced the slow-pacing mind of Washington. But, for all that, as you watch Burr's life, and many another's like him, you understand what Macaulay meant when he exclaimed: "as if history were not made up of the bad actions of extraordinary men, as if all the most noted destroyers and deceivers of our species, all the founders of arbitrary governments and false religions, had not been extraordinary men, as if nine tenths of the calamities which have befallen the human race had any other origin than the union of high intelligence with low desires." Was Nebuchadnezzar of Babylon unintelligent? Caesar and Napoleon--were they unintelligent? Has the most monumental and destructive selfishness in human history been associated with poor minds? No, with great minds, which, if the world was to be saved their devastation, needed to be reborn into a new spirit. The transforming gospel which religion brings is indispensable to a building of the kingdom of righteousness upon the earth.

Wherever one listens, then, to the typical teaching of modern Christians, he finds himself in the atmosphere of the idea of progress. Men's thoughts of God, of Christ, of the Church, of hope, their methods of apologetic, are shaped to that mold--are often thinned out and flattened down and made cheap and unconvincing by being shaped to that mold--so that an endeavour to achieve an intelligent understanding of Christianity's relationship with the idea of progress is in part a defensive measure to save the Gospel from being unintelligently mauled and mishandled by it. Marcus Dods, when he was an old man, said: "I do not envy those who have to fight the battle of Christianity in the twentieth century." Then, after a moment, he added, "Yes, perhaps I do, but it will be a stiff fight." It is a stiff fight, and for this reason if for no other, that before we can get on much further in a progressive world we must achieve with wisdom and courage some fundamental reconstructions in our Christian thinking.

[1] Aratus of Soli: *Phaenomena*, lines 122-3.

[2] Lucius Annaeus Seneca: *Naturalium Quaestionum*, Liber VII, 25.

[3] T. Lucretius Carus: *De Rerum Natura*, Lib. V, 1455--"Paullatim docuit pedetentim progredienteis."

[4] Marcus Aurelius Antoninus: *Meditations*, IX, 28; VI, 37; XI, 1.

[5] Andrew D. White: *A History of the Warfare of Science with Theology in Christendom*, Vol. I, p. 97.

[6] Roger Bacon: *Epistola de Secretis Operibus Artis et Naturae, et de Nullitate Magiae*, Caput IV, in *Opera Quaedam Hactenus Inedita*, edited by J. S. Brewer, p. 533.

[7] Jerome Cardan: *De Subtilitate*, Liber Decimusseptimus: De artibus, artificiosisque rebus.

[8] Edward Winslow: *Hypocrisie Unmasked*, p. 97.

[9] Ibid.

[10] Blaise Pascal: *Opuscules*, Preface to the Treatise on Vacuum, in *The Thoughts, Letters and Opuscules of Blaise Pascal*, Translated by O. W. Wight, p. 550.

[11] Alfred Tennyson: *Locksley Hall Sixty Years After*.

[12] Comte de Saporta: *Le Monde des Plantes avant L'Apparition de L'Homme*, p. 109.

[13] H. Faye: *Sur L'Origine du Monde*, Chapitre XI, p. 256-7.

[14] Joseph McCabe: *The End of the World*, p. 112.

[15] Eduard von Hartmann: *Ausgewählte Werke*, viii, pp. 572-3 (Leipzig, 1904).

[16] Joseph McCabe: *The End of the World*, pp. 116-117.

[17] Herbert Spencer: *Illustrations of Universal Progress*, Chapter I, *Progress: Its Law and Cause*, p. 58; *Social Statics*, Part I, Chapter II, *The Evanescence of Evil*, Sec. 4, p. 78 ff.

[18] Louis Bertrand: *Saint Augustin*, p. 342.

ON THE REGRET OF YOUTH.

The Project Gutenberg EBook of *Poems*, by Matilda Betham

Before a rose is fully blown,
The outward leaves announce decay;
So, ere the spring of Youth is flown,
Its tiny pleasures die away;

The gay security we feel,
The careless soul's delighted rest,
That lively hope, that ardent zeal,
And smiling sunshine of the breast.

Those simple tints, so bright and clear,
No healing dew-drops can restore;
For joys, which early life endear,
Once blighted, can revive no more.

Yet lovely is the full-blown rose,
Although its infant graces fly;
The various opening leaves disclose,
A fairer banquet to the eye;

A ruby's beams on drifted snow,
Such pure, harmonious blushes shed;
If distant, cast a tender glow,
But near, its own imperial red;

The form assumes a prouder air,
And bends more graceful in the gale;
While, from its cup, of essence rare,
A richer hoard of sweets exhale.

Could we again, by fancy led,
That bower of swelling leaves confine,
And round that fine, luxuriant head,
The mossy tendrils now entwine,

Over what multitudes of bloom
Would a few timid leaflets close!
What mental joys resign their room,
To causeless mirth, and tame repose!

The change to Reason's steady eye,
Would neither good nor wise appear;
And we may lay one precept by,
Our discontent is insincere.

Laboratory

The New International Encyclopædia

Edition of 1905. Written by James C. Lough, Robert William Hall, Alpheus Spring Packard, John Merle Coulter, Edward Bradford Titchener, and Herbert Treadwell Wade.

LABORATORY. A laboratory is literally a place of labor, a workshop, and the term is still frequently employed in this meaning in connection with the manufacturing of chemicals, drugs, explosives, etc. The word is ordinarily used, however, to designate a room or building equipped with means for conducting experimental investigations in some department of science or art. Research laboratories of chemistry, physics, engineering, biology, etc., are maintained in all the better colleges and universities, in the interest of pure and applied science, and in many hospitals, manufacturing establishments, etc., for the purpose of devising new methods of procedure and conducting tests of various kinds. In addition to these laboratories devoted to research, there are numberless laboratories connected with public and private schools, academies, and colleges, whose function is not the discovery of new truths, but rather the demonstration of facts already well established. Every high school, for example, possesses a chemical laboratory in which experiments are performed by students who are led in this way to a first-hand and therefore better knowledge of the facts and principles of this science.

The history of research laboratories can be best understood in the light of the development of all scientific thinking. There is at first a period of crude observation of the facts under the complicated conditions of practical life. Such observations have given to science many valuable facts, but serious errors have crept in at the same time. This is naturally followed by a period of reaction against observation and in its stead there is an attempt to deduce all knowledge from already given general laws. This is the period of authority and the syllogism. The reaction to this method leads to the third and final stage of science, when the laws and facts of nature are determined by means of observation of phenomena, but now under control and known conditions. The sciences have not advanced with equal speed, so that while some are well along in the third stage of progress and are still growing rapidly through experimental research, other sciences are in the second stage, while a few still remain in the first stage. Laboratories of some sort have existed since the earliest times. The Chinese and Egyptians, as well as the Greeks and Romans, certainly possessed them, but they were in all probability similar to the better known laboratories of the physicians, apothecaries, alchemists, and astrologers of the Middle Ages, given over largely to the search for the philosopher's stone, and to the manufacture of elixirs, drugs, charms, cosmetics, etc. With the fifteenth century came the reaction against Scholasticism; and men began to study nature rather than books, they began to observe rather than to deduce facts and principles, and by the end of the sixteenth century the experimental method was well established.

In 1589 Galileo demonstrated the necessity of the experimental method at Pisa. Climbing the leaning tower, he let fall a weight of one pound and a weight of one hundred pounds; starting simultaneously, the weights struck the ground together, at once and forever disproving the Aristotelian deduction that the speed of falling bodies was proportional to their weights. Francis Bacon, in 1620, and Comenius, in 1630, set forth arguments for the inductive method and the experimental investigation of facts. But prior to the nineteenth century all laboratories were private institutions devoted wholly to research. In 1824 Purkinje established a physiological laboratory in Breslau; in 1825 Liebig established a laboratory of chemistry, medicine, and physiology in Giessen; in 1845 Lord Kelvin—then William Thomson—opened a physical laboratory in the University of Glasgow; in 1849 a pharmacological laboratory was

created by Buchheim; in 1856 Virchow opened a pathological laboratory in Berlin. As the work of the laboratories has developed, there has come about a specialization of the problems to be undertaken, and as a result new research laboratories are founded every year.

Laboratories for instruction do not differ materially from research laboratories as far as equipment and method is concerned.

Chemical Laboratories. The appearance of the earliest chemical laboratories is familiar, since they formed attractive subjects for the contemporary artists. Not merely were these laboratories used for experiment, but also for the teaching of pupils and assistants. At present, any well-lit room, supplied with water, gas, electricity, and a hood communicating with a flue to carry off noxious gases, may serve for almost all chemical work. The water-supply operates vacuum-pumps, and can be made to furnish air under pressure by means of a tromp; power can be obtained either from small water or electric motors, and the gas furnishes heat. Much chemical work, both scientific and technical, is carried out in such laboratories, originally built for other purposes. The most important chemical laboratories, however, are buildings, constructed entirely for chemical work, in connection with the great universities and schools of science, and are intended both for investigation on the part of the instructors and advanced students and for the regular instruction of the mass of the students. The wide extension of this class of laboratories began with the famous laboratory erected by Liebig at Giessen in 1825, after which teaching-laboratories, each showing an advance on the preceding, sprang up at almost all the German universities and quickly reached a high degree of excellence.

The laboratory buildings are divided into rooms of varying sizes, each room assigned to one or more branches of chemical science, so that each student passes, during his course, through most of the rooms. In France a less systematic arrangement, avoiding large rooms, is preferred by some chemists. The number of the rooms and the branch of chemistry to which each is dedicated vary with the size of the building and the importance assigned to different subjects and to teaching and investigation respectively. Many laboratories consist of a large lecture-room, a large room for simple inorganic preparations and qualitative analysis; another large room for quantitative analysis and inorganic research; a third large room for organic chemistry; and a number of small rooms to serve as class-rooms, library, balance-rooms, private laboratories and offices for the instructors, for gas and water analysis, for physical chemistry, as furnace-room, combustion-room, hydrogen-sulphide room, storerooms, toilet-rooms, etc. In some cases separate buildings are provided for particular branches of chemistry. For example, the University of Göttingen has a separate building for physical chemistry.

In the larger laboratories almost every branch of chemistry has its separate room. Few general principles can be laid down for the plan of the building and the relation of the rooms to each other. The first consideration is to obtain abundant light. Everything should give way to this. Next the office and private laboratory of each professor should be central with reference to the rooms under his care. However, when permanent and responsible assistants are in immediate charge of the large rooms, this consideration is of less importance. Of course, such rooms as balance-rooms, combustion-rooms, and hydrogen-sulphide rooms, must be close to the large rooms to which they belong. Special considerations will decide the position of various rooms. Thus, a furnace-room is placed on the lowest floor to get the advantage of a high chimney. All chemical laboratories are elaborately piped. There is usually one system for gas used in heating, another for gas used in lighting, and often a third for certain specially protected gas-jets, which are required to burn continuously for long periods. This permits the rest of the gas to be turned off every evening at the close of work. Water is carried, not merely to each room, but commonly to each desk. Where the water is supplied under a strong pressure, injector vacuum-pumps are used, but when this is not the case, the whole building must be supplied with pipes

connected with a vacuum steam-pump. In any case such a pump, with connecting pipes to each desk, is almost a necessity in the organic laboratory, for distilling under reduced pressure. Another steam-pump supplies a series of pipes, carrying air under pressure. There are steam or hot-water pipes for heating and pipes for steam at high pressure for heating stills, water-baths, and steam-closets. In addition, in some laboratories distilled water is distributed to the different rooms, by a system of block tin pipes. Formerly oxygen was distributed to several points by pipes, but the introduction into commerce of compressed oxygen in strong steel cylinders has made this system obsolete. Hydrogen-sulphide gas is also carried, in most cases, by pipes to several rooms. The system of pipes for carrying off waste water must be carefully planned. Ordinary plumbing is destroyed in a few years by acids and compounds of mercury. An excellent plan is to carry the waste water by open troughs to the vertical earthenware main pipes, so avoiding leadwork altogether. The system of flues for ventilation of the hoods must be carried over the whole building. This system may be connected with a lofty chimney, or with a rotary fan. Electricity is usually supplied, for scientific purposes, from accumulator batteries.

Each student working in a room has a locked desk for his own use. The desks are usually supplied with gas, water, vacuum-pumps, draught-closets, apparatus, and reagents, so as to reduce to a minimum the cases in which it is necessary for the student to leave his desk. Space is economized in most laboratories, in the rooms set apart for beginners, by dividing the space under each desk into two independent closets, so that two students may use the same desk at different hours or on different days. In the larger laboratories much special apparatus is found, such as a machine for producing liquid air, grinding mills driven by power, working models of chemical industrial works, and apparatus for treating materials on an industrial scale.

The technical laboratories maintained by industrial establishments may be simply for analytical work, in which case they may be modeled after the rooms for quantitative analysis in the teaching laboratories; but in cases where experimental work is carried on, the plan is quite different. Power must be supplied more freely, facilities provided for handling larger quantities of material, and liberal space left free to set up working models of apparatus on a large scale. See section on Engineering Laboratories.

Physical Laboratories. Rooms specially equipped for physical experimentation were not provided until long after well-organized chemical laboratories were in use. Such early experimenters as Boyle, Newton, and Franklin made use of their own living apartments for their experiments, and it was not until well into the nineteenth century that professors of physics obtained separate rooms in which they could carry on work with due convenience. The next step was for these professors to admit students to their own laboratories, and to direct their research. At Heidelberg the first physical laboratory was opened in 1846, two rooms being devoted to instruction in practical physics. The laboratory at the University of Glasgow where original research was carried on by students under the direction of Lord Kelvin was also one of the earliest of these Laboratories. In France, in spite of the brilliant work done in private laboratories in the first half of the nineteenth century, the facilities for systematic work by students were hardly as ample as in Germany, but by 1868 it was realized that additional accommodations for students and research laboratories for professors and skilled investigators were essential. One result of this movement was the foundation, in the Sorbonne in Paris, of a physical laboratory, of which Jamin was made director, and which has been celebrated not only for his researches, but also for those of Lippman. This laboratory was placed under the direction of the faculty of science in 1894 and was then remodeled. King's College, London, also adopted regular laboratory training as part of its work in physics about this time, and three rooms in its building were used as a laboratory. The first building in England specially designed for the study of experimental physics was constructed at Oxford, under plans of Prof. Robert B. Clifton. This was followed by the Cavendish

laboratory at Cambridge, built in 1874 by Prof. James Clerk-Maxwell, who incorporated in it many of Professor Clifton's ideas. In the United States the progress was naturally slower than in Europe, but it is asserted that the first institution to make laboratory physics a part of its regular educational work was the Massachusetts Institute of Technology, in Boston. The systematic work begun at the Massachusetts Institute of Technology in practical physics furnished an example which was soon followed by other American colleges, including Cornell and Harvard, and even by many high schools, and so rapid was the progress made that in 1886 Harvard required experimental work in physics in its entrance examinations.

In elementary laboratory work in physics, the apparatus is simple and the results demanded are qualitative rather than quantitative. A laboratory for this purpose would be merely one or more rooms provided with suitable tables. The simple apparatus used should, where possible, be constructed by the student himself, the use of tools for the making, adjusting, and repair of apparatus forming not the least valuable part of the training. The ordinary manipulation of glass tubes, and the use of the more common wood-working tools, as well as of a few implements for cutting and shaping metal, must be learned by the student at an early stage.

The entrance requirements for the colleges have set the standard for the physical work to be done in preparatory schools. No elaborate instruments are required for such courses, and it is considered better practice to have the student work as accurately as possible with somewhat crude apparatus. In the college laboratory the equipment is of a much higher grade, and should be as extensive as the means of the institution will permit. The student here begins to work quantitatively, and accuracy of observation and measurement is the prime essential of his work. The usual method of instruction is to have an elementary course which covers the essential features of physics. That is, a student will begin with the ordinary measurements of length, mass, and time. He will perform quantitative experiments in sound, heat, light, and electricity. There must be at his disposal measures of length and micrometers of various forms which will enable him to determine length or thickness to one-hundredth of a millimeter, or even less. He will also have analytical balances for determining the mass of substances with an accuracy of the one-hundredth of a milligram, and such other instruments as accurately calibrated thermometers, standards of electrical resistance carefully determined, and optical apparatus in which the graduated circles and other parts used for measurement are of high precision. As the construction of this apparatus involves considerable mechanical skill, it is, of course, impossible for the student to make it; but its test and calibration is one of his first tasks. He is taught the necessity of correcting his observations and looking for and compensating for such causes of error as can be detected, and, in short, to attain as great accuracy as the apparatus he uses is capable of.

For elementary laboratories no extensive and peculiar structural features are required in the building. Suitable brackets firmly fastened to brick walls furnish supports for the more sensitive apparatus, and convenient sinks and water and gas piping and electric fittings are provided, in most colleges and universities, however, these elementary laboratories are in the same building as research laboratories for the staff and advanced students, and as a result they contain many features not absolutely essential for work of this description. In building physical laboratories for research work, every other consideration is, or should be, sacrificed to direct utility. Stone piers on which such instruments as galvanometers are set are independently founded and carried up through one or more floors, without any connection whatsoever with other parts of the building. Stone tables or slabs for similar purposes are built in the brick structural walls of the building. High towers for experiments with pendulums, pressures of liquids, and falling bodies are another feature of a modern laboratory, and in most cases they, too, are built on an independent foundation. The building is usually arranged so that it has the best possible light, especially as regards direct sunlight. For certain work electrical or other power is

desirable, and a system of pipes, wiring, and shafting is carried about the building. Another feature is a constant-temperature room in the cellar, usually where the astronomical clocks and other instruments which must be maintained at or near the same temperature the year around are installed. In short, the greatest care is observed in adapting the building for its use as a place of research, and every convenience is placed at the disposal of the student. It must be stated, however, that many physicists do not altogether approve of such refinements of laboratory construction, and think that the ability to overcome difficulties is a valuable part of the training. Furthermore, the very nature of the refinements may in some cases constitute serious causes of error. For example, an independent tower or pier may act as an inverted pendulum and have a period of vibration of its own. But be this as it may, it is undoubtedly true that at the German universities, where the greatest facilities have been introduced into the buildings and are put at the disposal of the students, the best work is carried on. The laboratory belonging to the University at Strassburg, and that of the Polytechnikum at Zurich, are typical of the best progress in modern laboratory construction, although Berlin and a number of other German universities are not far behind.

But important physical research has also been carried on in laboratories outside of educational institutions, and the more celebrated of these deserve brief mention. The laboratory of the Royal Institution in London was founded in 1800 by Count Rumford, and although the original intention of its founder was the furtherance of applied science, it soon became the home of the most brilliant and original investigations in the realm of pure science, carried on by such men as Sir Humphry Davy, Faraday, Tyndall, Rayleigh, and Dewar. In 1896 the research facilities of the Royal Institution were increased by the opening of the Davy-Faraday Research Laboratory, which has been most successfully conducted by Lord Rayleigh and Prof. James Dewar. In Germany the most important work has been carried on at the Reichsanstalt, or physico-technical institution, at Charlottenburg, near Berlin. Through the munificence of Werner Siemens, who in 1884 gave about \$125,000 to the institution, and through appropriations by the Reichstag, suitable buildings were erected, and from 1888 to 1894 the laboratory was directed by Helmholtz. The influence of the Reichsanstalt on industrial conditions in Germany has been most valuable. Various standards are here made, instruments are calibrated, and certificates which have a worldwide acceptance are given to the apparatus which complies with the standards of the bureau. Technical research is also carried on, and many valuable papers are published from time to time from the bureau. Various instruments of glass are examined, and the work of the Germans in this field has been raised to a high degree of excellence, with the result that the manufacture of optical instruments has greatly increased. The same holds true in the case of electrical apparatus, and the standards of resistance and other apparatus also have been made of a high grade of precision. In Paris there is the Conservatoire des Arts et Métiers. With the purchase of a physical cabinet, a department of physics was organized in 1829, which has since been increased and developed, and furnished a home for important researches. Perhaps the most celebrated laboratory in France is the International Bureau of Weights and Measures, organized in 1875 by the cooperation of eighteen different nations. Here are prepared for distribution to the subscribing nations the various metric standards of length and mass; the meter and kilogram of the archives with which the secondary or natural standards have been compared are preserved. In this laboratory are carried on the most elaborate comparisons of standards and instruments, and the work of this bureau has been invaluable to workers in science in many departments. A national physical laboratory was established in Great Britain during the closing years of the nineteenth century, and to it in 1900 was given a building and site near London, its control being given to the Royal Society. Here a beginning has been made of supplying means for important physical investigations, and the equipment is being rapidly increased. In the United States, in 1901, the National Bureau of Standards was established by act of Congress, approved March 3, 1901; it is designed to possess a similar function to the Reichsanstalt and the National Physical Laboratory of England. In 1903 a building was being erected for the laboratory of this bureau, and active plans had been made for

its investigations. By law it is given the custody of the national standards, and will issue secondary standards for the use of industrial and scientific workers. So valuable and important has been the work of similar institutions in Europe that the National Bureau of Standards was demanded by united scientific and manufacturing interests.

Engineering Laboratories. The success which has attended chemical, physical, and other laboratories organized either for instruction or research has led to the establishment of engineering laboratories in which the student is taught to apply himself particularly to such problems as he would encounter in the actual practice of his profession. Such laboratories are also used by advanced workers to study experimentally such difficulties as are encountered in daily life, with the hope of finding simpler and more economical methods. Accordingly, there are laboratories for mechanical engineering, hydraulic engineering, mining engineering, electrical engineering, and chemical engineering, in which are installed machinery and apparatus similar to that found in actual practice. Such laboratories have been found essential for the best professional and technical education, and are a distinct feature of well-equipped technical schools and universities in Europe and America. A mechanical engineering laboratory contains machinery for studying different forms of motors and power transmission and for determining their most economical operation. This would include the ascertaining of friction losses, the study of various kinds of lubricants, etc. In order to carry on this work as successfully as possible, machinery of such size as will be found in a small plant is necessary, and the students are taught its actual operation and maintenance. In some schools there may be an independent steam-engineering laboratory, while in others it may be a part of the laboratory of mechanical engineering. Here the students are taught to use steam-engines of different types under varying conditions of service. In the important schools of mines are usually found the various machines used in mining and the preparation and reduction of ore. Locomotive engineering is now taught in the laboratory, and at least two universities in the United States, as well as several manufacturing works, are supplied with testing locomotives in which full friction, draught, and other tests can be made on a large scale. Electrical-engineering laboratories were perhaps the first to be carried on on an extensive scale, as in the laboratory method of instruction machinery of more than model size was early found necessary for the student. In the best electrical-engineering laboratories are to be found motors and dynamos for direct and alternating current-transformers, storage batteries, etc., and the various problems involved in the generation of the electrical power and its transmission are studied under conditions approaching actual practice as nearly as possible. In chemical engineering the growth of large manufacturing establishments has led to a demand for practical chemists, and it is now considered that these can best be trained by having students carry out preparations on a considerable scale by using actual machinery. In the most modern of laboratories for the study of applied chemistry, such processes as dyeing, the manufacture of sugar, the manufacture of sulphuric acid, electrolytic methods of preparing chemical substances, distillation, etc., are all carried on on a practical scale.

In engineering laboratories the practice will vary widely in different institutions and with different instructors, depending on adequacy of equipment and number of students. The machinery and apparatus at the disposal of the students and instructors will often influence the work done, and will cause students desiring to follow a particular branch to select an institution where such facilities are the best. Engineering laboratories usually follow adequate manual training and work in chemical and physical laboratories, and the best results are secured when the work is properly coördinated. They have a distinct bearing on technical education, and have played their part in the industrial development of the United States.

Biological Laboratories. An enormous impulse was given to the purely scientific advancement of biological science by the early foundation of laboratories for research in connection with the chief

German universities in the third quarter of the last century. In the United States, the first zoölogical laboratory, or, indeed, any in general biology in this country, was established by Louis Agassiz at Harvard College, at the middle of the nineteenth century, when Wyman also taught to special students comparative anatomy. Agassiz gathered about him and trained specialists in zoölogy, most of whom became teachers and perpetuated his methods of instruction. In Europe, Johannes Müller established a laboratory at Berlin (1857-58), and trained many students, who afterwards filled chairs in different universities. The impetus he gave to comparative anatomy, physiology, and embryology through his laboratory methods was deep and lasting. He was perhaps the father of modern morphological investigations and of laboratory methods. Other zoölogists who exerted an influence which was felt by a later generation, and led the way to the establishment of marine biological laboratories, were the Norwegian naturalist Sars (1805-69), who carried on deep-sea dredgings and embryological researches on the coast of Norway: Rathke of Dorpat; and Forbes of Great Britain. During this period H. Milne-Edwards and De Quatrefages worked in temporary private laboratories on the French coast and in the Mediterranean.

The third quarter of the nineteenth century was a period of the installation of biological laboratories in connection with the leading universities, especially in Germany. The workrooms were fairly large and well lighted; but the furniture was simple, tables, dissecting implements, microscopes, aquaria, and in the basement perhaps a vivarium for mammals, forming the greater part of the furniture. Such a laboratory was that of R. Leuckart at Leipzig, who trained a large number of German, Swiss, American, English, and Dutch zoölogists and morphologists. With the rise of more modern modes of investigation in comparative embryology and morphology, involving methods of cutting their sections for the microscope, of staining and mounting them, the use of various reagents and preservative fluids, the equipment of biological laboratories became more and more elaborate and costly.

Our modern bacteriological laboratories took their rise from the researches of Pasteur in France (1866-90). His studies led finally to the establishment of the great Pasteur Institute in Paris, which was followed by the installation of bacteriological laboratories in Germany, Italy, and other European countries, as well as in the United States and Canada—institutes either directly connected with universities and medical schools, or independent. In such laboratories as these, and other temporary laboratories established in Italy, West Africa, India, and Cuba, have been worked out the causes and preventives of the filth diseases, of yellow fever and tuberculosis.

Marine laboratories have exerted a profound influence on biological science, besides training science teachers and aiding investigators. Müller in Germany spent his summers by the seaside, studying the anatomy, and especially the development, of the lower animals; and so in France and on the shores of the Mediterranean did H. Milne-Edwards and De Quatrefages, and Gosse on the English coast. We owe, however, to Louis Agassiz the idea of the foundation of the modern seaside or marine laboratory, which has resulted in the establishment of the great zoölogical station at Naples, those of France and other countries. Agassiz and his students had for many years dredged and collected along the coast of New England, and had spent several winters at Charleston, S. C., to study the marine fauna. In 1873, aided financially by a generous friend of science, he founded the Anderson School of Natural History at Penikese, an island situated at the mouth of Buzzard's Bay. Though, owing to Agassiz's death, it flourished only two years, its work was most important in itself, and because it led to the formation of similar laboratories. It led to the foundation of the Chesapeake Zoölogical Laboratory of the Johns Hopkins University, under the direction of Prof. W. K. Brooks, which was succeeded by temporary laboratories at Beaufort, N. C., and the Bahamas; also to the summer school which was maintained at Annisquam for several years by the late Professor A. Hyatt, and to a summer school carried on by the Peabody Academy of Science at Salem, Mass., in 1876-81, and to others, such as the summer school

held under the auspices of the Brooklyn Institute at Cold Spring Harbor, Long Island; the Hopkins Seaside Laboratory of the Leland Stanford, Junior, University, in California; and the Tufts College Laboratory at Harpswell, Maine, under the direction of Professor J. S. Kingsley, and that at Beaufort, N. C., connected with Columbia University. Mr. A. Agassiz has for many years maintained a well-appointed private laboratory at Newport, where a number of investigators have worked through the summer months.

Led by Louis Agassiz's example. Dr. Anton Dohrn in 1872 began to build, and in the following year opened, a costly zoölogical station at Naples, where gather zoölogists of different countries, whose researches, carried on under the most favorable auspices, have had a manifest influence on systematic, and more especially embryological and morphological, studies. This is a permanent institution established in a handsome structure built for the purpose near the sea, with a director and staff of assistants, and open to investigators throughout the year. Tables are offered to investigators of different countries, the expenses or rent being paid in some cases by the British, American, and other associations, universities, and other institutions. The basement is occupied by a series of large, well-stocked aquaria, and is open to the public. There are a large library, separate workrooms for investigators, steamers for dredging, collection, and preparation, while the institution issues several publications of importance to zoölogists.

This great establishment has been the parent or forerunner of similar laboratories. The late distinguished French zoölogist Baron H. Laeaze-Duthiers founded and built at his own expense two well-equipped seaside laboratories, one at Roscoff, in Northwestern France, and the other on the Mediterranean, near the Spanish line, at Banyuls-sur-Mer. These have been utilized not only by French, Swiss, American, and English investigators, but by a large number of French students of the Sorbonne and the Collège de France. There is also a laboratory at Concarneau, under the auspices of the Collège de France, and still another at Areachon, maintained by the University of Bordeaux. The city of Paris supports a Laboratoire d'évolution des êtres organisés, 3 Rue d'Ulm, directed by Prof. A. Giard, who has a private laboratory at Wimpeau, near Calais. These were followed by the Plymouth Laboratory, on the English Channel, at which work a small number of investigators, while in the summer season classes from Oxford, Cambridge, and Eton study under an instructor, one of the officers in charge. Other smaller seaside laboratories have been established by Professor Herdman near Liverpool, at Millport; one at Port Erin, on the Isle of Man; one near Bristol; another near Aberdeen, on the North Sea coast; and one near Dublin, on the Irish coast. These are associated together, and controlled by the 'Marine Biological Association of the United Kingdom,' and in part are supported by grants from the British Association, the Royal Society, etc. The Germans largely patronize the Naples station, but have a small one at Helgoland, while the university at Vienna sustains a well-appointed one at Triest. The Russians have one at Sebastopol, and also at Ville Franche, on the Mediterranean; the Dutch on the coast of Holland; the Danes on their coast; while the University of Tokio maintains one on the Japanese coast.

Floating marine laboratories, as they may be called (i.e. those on shipboard), were established on the British exploring ship Challenger during her five years' voyage around the world, and fully equipped laboratories have been furnished on the various exploring oceanic expeditions, including the five recently sent out to the Antarctic seas by the German, Swedish, English, and Dutch governments.

The laboratories in connection with the fisheries commissions of the United States, Germany, Norway, and Great Britain have been productive of excellent results, both scientific and practical. Early in the seventies of the nineteenth century, Professor S. F. Baird, the founder of the United States Commission of Fish and Fisheries, and its first commissioner, was wont to establish at his summer headquarters, in

different seasons, at various points along the coast of New England, from Woods Hole to Harpswell, Maine, temporary laboratories, at which students were hospitably entertained. This led to the permanent establishment of two institutions at Woods Hole. The Woods Hole Laboratory has exerted much influence. To this school large numbers of investigators and college students have flocked, and it has been a most important means of training science teachers. The laboratory of the United States Fish Commission at Woods Hole is a permanent institution, open winter and summer to experts. It is well equipped, and frequented by a large number of investigators and advanced students. Its official organs are the reports and bulletins of the United States Fisheries Commission, and the entire plant is probably the most elaborate and extensive in the world. The marine laboratory established in 1902 at Beaufort, N. C., by the United States Fish Commission is still larger, and promises to be the leading one in this country. The floating laboratory of the Rhode Island Commission of Inland Fisheries has carried on important work on the development and artificial culture of the clam and lobster, and the results have been published by the State.

Several summer laboratories for the study of aquatic life, insects, fishes, etc., as well as for educational purposes, have been established in the Central United States. Of these, the first to be founded, and the one which has been the most productive of results advantageous to science, is that at Havana, Ill., founded by Professor S. A. Forbes. It has published a bulletin, and has from the first shown great activity. In Europe, a well-known fresh-water laboratory has for several years been maintained by Professor Dr. O. Zacharias, at Plön in Germany.

All botanical laboratories equipped for elementary instruction are practically the same. It may be assumed that such establishments provide equipment for fundamental courses in morphology, physiology, ecology, and perhaps taxonomy. In provision for research work, however, botanical laboratories vary widely. There is probably no complete botanical laboratory in the world, in the sense that it provides for every phase of botanical investigation. Each prominent laboratory is strong in one, or perhaps a few, of the many phases of botanical research, and this is recognized by graduate students in selecting a laboratory for definite work. Since the chief opportunity of any botanical laboratory is the staff of men in charge of the work, every laboratory has developed about certain men rather than along theoretical lines. While worthy morphological and physiological laboratories can be developed in connection with any university that has money enough to employ suitable men and furnish them equipment, worthy taxonomic equipment is a matter of historical development. It involves the accumulation of large collections, whose chief value lies in sets of plants that are not in the open market. For example, while there are possibly ten botanical laboratories in the United States in which the opportunities for research in morphology, physiology, and ecology may be regarded from fair to excellent, there are only three, or at most four, points where great historical collections of plants have made valuable research work in taxonomy possible. See Botanic Garden.

Psychological Laboratories. The first laboratory for the pursuit of researches in psycho-physics and experimental psychology (qq.v.) was founded by Wilhelm Wundt at Leipzig in 1879. Laboratories have now been established at most of the leading German universities. The first laboratory in the United States was founded at the Johns Hopkins University in 1881 by G. S. Hall, but laboratories are now the rule rather than the exception in American universities and colleges.

France has an excellent laboratory at the Sorbonne, Paris. England has small laboratories at Cambridge and London, but has so far done little for the cause of experimental psychology. Valuable investigations have also come from Denmark (Copenhagen), Sweden (Upsala), Norway (Christiania), Belgium (Liège), Holland (Groningen and Utrecht), Austria (Vienna and Gratz), Russia (Saint Petersburg and Moscow), and Japan (Tokio), some of them from psychological laboratories proper, and some from

laboratories of physiology.

The recent development of psychology as a science, the multiplicity of problems that crowd upon the investigator, the varied training of the men who have devoted themselves to psychological experiment, and the makeshifts to which psychologists are forced by inadequate laboratory accommodation, render it exceedingly difficult to give any typical description of the arrangement and furnishing of the psychological laboratory. We may, however, say, without much fear of contradiction, that the 'ideal' laboratory would present at least the following features: There should be (1) a large lecture-room or auditorium, capable of seating some 300 hearers, with a good demonstration table and arrangements for lantern projection. Behind the lecture-room, and opening into it, should be (2) a museum or storeroom, in which are displayed not only all the demonstration instruments required for a general lecture course, but also series of standard pieces illustrating the historical development of experimental method. (3) For work in optics, there should be two dark rooms, adjoining and connected, and it would be well if the larger of the two, the anteroom, should have a window opening into the general lecture-room. This anteroom is necessary for the demonstration of certain phenomena of contrast (q.v.), for work on visual adaptation, on association of ideas, etc., etc.; while the inner room is useful for more refined investigation—e.g. for spectrometric research. The window in the side of the lecture-room gives the lecturer a black background against which certain demonstrations can be made, without darkening the lecture-room itself, far more effectually than against a black screen. (4) For acoustics, there should be available a suite of three rooms, one of which should be made, as far as possible, sound-proof, as well as light-proof, and all of which should be connected by acoustic tubes for the transmission of auditory stimuli. (5) For work upon the sense of smell, there should be a special room, with tiled floor and glazed walls and especial ventilating arrangements. The rest of the laboratory proper should be taken up with large rooms, well aired and lighted, for class work in the practice courses; a set of small, closet-like rooms, occupied by advanced students; a series of rooms devoted to observations upon the lower animals; a centrally situated room, containing the measuring instruments (chronoscopes, chronographs, etc.), upon which a call may be made from any part of the laboratory; the private laboratories of the instructing staff; and a library and writing-room. The only other feature of the laboratory that demands separate mention is (6) the workshop, which should be adequately fitted with the tools needed for wood and metal work, and should have an abundant power supply.

The instrumental outfit of the laboratory is described under the heading Psychological Apparatus. A few points as regards furniture and fixtures may be noticed here. Every room should be supplied with gas and electricity, and certain rooms (for which absolute quiet is not essential) with water. The rooms employed for class work should have small, low tables, accommodating each a pair of students, and shallow, glass-fronted wall cases to contain the instruments when not in use. Comfort on the part of the observer is essential to good introspection; for this reason there should be special narrow tables for experiments upon smell and taste; couches or reclining chairs for work upon the cutaneous sensations; and high desks for certain experiments upon visual contrast and after-images. The whole laboratory must be wired for telephone or bell signals, so that any two available rooms may be connected together for a particular investigation without disturbance to other workers by passage to and fro between them.

Literature. Holman, "The Functions of the Laboratory," in *Technology Review* for 1899; Welch, *Evolution of the Modern Laboratory* (Smithsonian Report for 1895); *Das chemische Laboratorium der Ludwigs-Universität zu Giessen, nebst einem Vorwort von Liebig* (Heidelberg, 1842); Lang, *Das chemische Laboratorium an der Universität Heidelberg* (Karlsruhe, 1858); Kolbe, *Das neue chemische Laboratorium der Universität Leipzig* (Leipzig, 1868); Fischer and Gruth, *Der Neubau des ersten chemischen Instituts der Universität Berlin* (Berlin, 1901); Chandler, *The Construction of Chemical*

Laboratories (Washington, D. C., 1893); "Les laboratoires de chimie," in *Encyclopédie chimique* (Paris, 1882); Arendt, *Technik der Experimentalchemie* (Hamburg, 1900). Minot, in vol. xiii. of *Science* (1901), advocates small rooms of uniform size for laboratories in secondary schools. Smith and Hall, *Teaching of Chemistry and Physics* (New York, 1902); Cajori, *History of Physics* (New York, 1899); Davis, *Handbook of Chemical Engineering* (Manchester, 1901); Delabarre, *L'année psychologique*, vol. i. (Paris, 1895); Münsterberg, *The Psychological Laboratory of Harvard University* (Boston, 1893); Titchener, in *Mind*, n. s. vol. vii. (London, 1898), which gives a bibliography; id., in *American Journal of Psychology*, vol. xi. (Worcester, 1900); id., *Experimental Psychology* (New York, 1901); Sanford, *Experimental Psychology* (Boston, 1898); id., in *American Journal of Psychology*, vol. v. (Worcester, 1892-93). See also *Observatory*.

United States Supreme Court

149 U.S. 557

BRIGHAM v. COFFIN

This was a suit in equity by Wilbur F. Brigham against Judson H. Coffin and others for the infringement of a patent. The court below dismissed the bill, (37 Fed. Rep. 688,) and complainant appeals. Affirmed.

Statement by Mr. Justice BROWN:

This was a bill in equity for the infringement of letters patent No. 283,057, issued August 14, 1883, to Frank E. Aldrich, for an improvement in rubber cloths or fabrics.

The patentee stated in his specification:

'My invention relates more especially to means for ornamenting the cloth or fabric, and it consists in a rubber cloth or fabric composed wholly or in part of rubber, having one or both of its surfaces provided with useful or ornamental designs or figures printed or stamped thereon with an ink or compound of a different color or shade from the body of the fabric by means of rollers, blocks, or in any other suitable manner, the ink or compound preferably containing rubber, caoutchouc, gutta percha, or some analogous material, as hereinafter more fully set forth and claimed.

'In carrying out my invention I take an ordinary rubber cloth, preferably gossamer rubber cloth, or any fabric composed wholly or in part of rubber, and print or stamp its finished surface or surfaces with an ink or compound of a different color or shade from the body of the goods by means of engraved rollers, blocks, types, dies, or in any other suitable manner. I deem it preferable, however, to use rollers, one or more being employed, according to the number of colors to be applied, and the cloth passed in cuts through the printing machine, after the manner of printing calico and similar goods.

'The ink or compound employed in printing the figures or designs on the cloth or fabric is prepared as follows: Take one-half pound of rubber or caoutchouc, four quarts of naphtha, one-half pound of red lead, and one-eighth of an ounce of flowers of sulphur. Dissolve the gum in the naphtha, and then add and thoroughly mix the other ingredients therewith.

'I do not confine myself to the exact proportions given, as these may be varied considerably without

materially changing the nature of the compound; and, instead of naphtha, some other solvent may be used for the rubber, if desired, although naphtha is deemed preferable. Also, instead of the lead, litharge, pigments, shellac, ocher, lampblack, or any other coloring matter, may be employed, according to the shade or color it is desired to give the ink.

'As I propose to make the ink or printing compound described the subject-matter of other letters patent, he same is not herein claimed when in and of itself considered.'

His claims were as follows:

'(1) As an improved article of manufacture, a rubber cloth or fabric composed wholly or in part of rubber, having one or both of its surfaces printed or stamped with useful or ornamental designs or figures in an ink or printing compound of a different color or shade from the body of the cloth or fabric, substantially as set forth.'

The second claim was like the first, except that the ink or compound is described as being 'composed in part of rubber, caoutchouc, gutta percha, or some analogous substance, and a coloring material or materials, substantially as specified.'

The third claim was like the second, except that, instead of the words, 'and a coloring material or materials,' there is substituted, 'and containing sulphur, or an ingredient for rendering the ink vulcanizable.'

The fourth claim was like the first, except that the cloth or fabric is described as 'varnished.'

The fifth claim was also like the first, except that the ink or printing compound is described as 'analogous to the coating of the cloth or body of the fabric, and of a different color or shade therefrom.'

The sixth claim was also like the first, except that the ink or compound was described as 'containing rubber and sulphur, or an ingredient for vulcanizing the rubber when subjected to heat or the sun's rays.'

The seventh claim was like the sixth, except that the words 'the sun's rays' were omitted.

The answer denied that Aldrich was the inventor of any material or substantial part of the thing patented, and gave notice of prior patents; denied that the Aldrich patent described anything of value or importance; averred that it was practically worthless; denied that the invention was any advance upon the art of making rubber fabrics, or that such fabrics had ever been practically manufactured as described in the patent. The answer also denied infringement.

On a hearing upon pleadings and proofs in the court below, the bill was dismissed, (37 Fed. Rep. 688,) and the plaintiff appealed.

* *

Thos. Wm. Clarke, for appellant.

J. E. Maynadier, for appellees.

Mr. Justice BROWN, after stating the facts in the foregoing language, delivered the opinion of the court.

Notes

This work is in the public domain in the United States because it is a work of the United States federal government (see 17 U.S.C. 105).

DRUG THEMES IN FICTION

by Digby Diehl

https://en.wikisource.org/wiki/Drug_Themes_in_Fiction/Drug_Themes_in_Fiction

Literature, in all of its myriad forms, has historically performed as a mirror of mainstream culture, with only periodic nods toward the ghettos, hidden byways, and subcultures of civilization. Drug-related literature is no exception to this rule, for the literary references to drug use closely parallel popular attitudes toward drugs, from the earliest writings of man up to the present. The nineteenth century Romantics in France—particularly Baudelaire and his literary circle—provided the first concentration of drug-related literature which was not only a curiosity of Eastern exoticism, but an aesthetic mode. For reasons which will be made clear within this study, traditional drug literature in England and America from 1900 to 1945 was a faded continuation of Romantic literary notions inherited from the 19th century French tradition. The 1950's in America brought about a curious shift in the literary mainstream, placing sudden emphasis on the previously-ignored subcultural themes of sex, drugs, and race—a shift instigated by World War II experiences. Although the mid-1960's saw the most concentrated use of drugs in the American culture recorded in our history, it was not until the present decade that writers began to deal with spiritual and psychological explorations of drug experience as a way of continuing that Romantic visionary quest through the interior flights of chemically-stimulated fantasy.

Within English and American traditional fiction from 1945 to the present we may roughly distinguish three chronological and thematic categories:

1. Post World War II through the late 1950's. The prevalent drug is heroin; the central figure is the junkie; and the literary emphasis is upon a life style of existential alienation—a Romantic submergence in the drug subculture.
2. The Rock 'n Roll Flower Children of the 1960's. The prevalent drugs are marijuana and LSD; the central figure is the youthful student hippie; and the literary emphasis is upon experiential politics and social philosophy—the emergence of a "counter-culture" which challenges the dominant culture.
3. The Disillusionment of the 1970's. The prevalent drug (if you will) is imagination; the central figure is the visionary; and the literary emphasis is upon the drug hallucination—the imaginative projection as a mode of alternative reality.

The history of drug-related traditional literature is not only a study in shifting cultural attitudes, but a record of reaction to the increasing amount of knowledge in scientific areas, particularly in pharmaceuticals. From the medieval exorcist to the Elizabethan alchemist to the fin-de-siecle apothecary, small growth in real understanding of biochemistry is seen; rather, the witchdoctor dressed in varying historical guises, always relying upon some form of narcotic. Well into the twentieth century, appalling

mythologies and frauds were accepted as medical fact (Hechtlinger). World War II seems to represent a turning point. It was after this war, which prompted sophisticated medical research, mixed fighting men interracially, and took American fighting men into Japan and the culture of the East, that interest increased in such works as Baudelaire's *Paradis Artificiel*.

In the late 1940's, at the convergence of pharmaceutical knowledge and subculture discovery, literature turns to the world of the junkie, the Negro, the jazz musician, the homosexual, and the existential wanderer. From Frankie Machine in Nelson Algren's *The Man with the Golden Arm* to Hunter Thompson's pseudo-biographical antics in *Fear and Loathing in Las Vegas*, drug-related literature becomes more and more clearly the literature of picaresque experience. As intellectual currents have flowed away from the certain axioms of Marx and Freud toward the absurdity and nausea of Camus and Sartre, drug literature has become a symbolic quest through the ultimate frontier of the mind.

However, in order to follow the thematic development of drug literature in the twentieth century, we must look backward to the Romantic era, when a clear pattern of interaction between literature and drug use emerged in the French literary circle of Baudelaire. For research continuity, we are fortunate to have the only study of previous drug-related literature, by Professor Emanuel J. Michel, Jr., whose close reading of Baudelaire and his contemporaries reveals themes which continue to play throughout drug literature in England and America in the twentieth century (Mickel).

French interest in the Orient played a significant role in the development of drug literature. After the opening of trade relations with the Far East under Louis XIV, French aristocrats and intellectuals became fascinated with Oriental furnishings, clothing, curiosities, and various spices and perfumes—interest which continued to emerge periodically in later centuries. These symbols of exoticism hinted particularly to the 19th century French writers at a bizarre way of life, much as the "exotic Negro subculture" has titillated 20th century American intellectuals. And, much as our drug culture of the American fifties was accompanied by Zen Buddhism, late 19th century France was inundated by various esoteric philosophies that sought the Greater Reality and universal correspondences. The Romantic era saw drugs flourishing in a world of semi-mystics, occultists, magnetists, and spiritualists.

Secondly, the 19th century drug poets suggested a Romantic vogue for spiritual transcendence and mystical escape from the ugly world of scientific reality and rational limitations. This yearning quickly translated itself in the form of Transcendentalism in 19th century America. "Perhaps its most important use, however, was as a means of presenting the world as a place in which one cannot really find reality. It has been used effectively by authors in connection with a character who participates in two distinct existences, both of which appear to be authentic." (Mickel, p. 348.)

Finally, the French Romantics explored one of the least noted areas of drug use in literature (and one with great potential for contemporary examination): the effect of the drug experience upon aesthetic sensibilities. *The Artificial Paradises in French Literature* offers extensive insight into drug imagery and drug-influenced aesthetics in Baudelaire. But the list of French writers and painters of that era whose work was undoubtedly influenced by the use of opium or hashish includes Lamartine, Nodier, Musset, Hegesippe Moreau, Murger, Grandville, Nerval, Balzac, Barbey d'Aurville, Sue, Boissard, Karr, Gautier, Dumas, and Hugo.

Early in the twentieth century, literary continuations of the themes explored by both the drug-using French and English writers (e.g., Samuel Coleridge and Thomas De Quincey) continue to be manifest in English language fiction. Joseph Hergesheimer's *Java Head* (1919) is a popular novel of the period which indicates the continued association of drug use with exoticism. The theme of this work involves

Chinese immigrants and their use of opium as a cultural curiosity, rather than a decadent delight. This same "Kubla Khan" attitude is expressed in Aleister Crowley's novel *The Diary of a Drug Fiend* (1922), Crowley, who was an eccentric English outcast given to sexual excesses and rites of black magic, saw in his use of heroin a plunge into an illicit experience which enriched and strengthened the personality. *The Diary of a Drug Fiend* is allegedly based upon an actual situation in which Crowley took a group of drug addicts to an abbey in Sicily where they were allowed to indulge their drug needs to the fullest. Crowley's Romantic attitude is evident in the following passage from the *Diary*:

Man has a right to spiritual ambition. He has evolved to what he is, through making dangerous experiments. Heroin certainly helps me to obtain a new spiritual outlook on the world. I have no right to assume that the ruin of bodily health is injurious; and "whosoever will save his life shall lose it, but whoever loseth his life for My sake shall find it." (Crowley, p. 253.)

Throughout Crowley's novel we find emphasis upon the magical exotic aspects of drugs, in addition to the romantic search for some form of transcendence. But Crowley clearly had little interest in aesthetics. In the novel, his persona King Lamus says:

What is modern fiction from Hardy and Dostoevski to the purveyors of garbage to servant girls, but an account of the complications set up by the exaggerated importance attached by themselves or their neighbors to the sexual appetites of two or more bimanous monkeys. (Crowley, p. 138.)

Crowley's work marks the appearance in English drug literature of two leit-motifs which continue to be prominent up to the contemporary period: first, the strong association of drugs with sexuality and, second, the use of drugs as a mode of personal development or exploration. This latter element of Crowley's writing connects with the Romantic notion that reality could be found within the drug experience—a notion quite clearly reaffirmed in the books of the contemporary author Carlos Castaneda, especially in *A Separate Reality*.

From the viewpoint of the 'thirties, the Crash of 1929 and the resultant Depression were penance for the decadence of the 1920's. In these circumstances, drug usage was viewed not as exoticism but as degeneracy. Somerset Maugham's *Narrow Corner* (1932), while not lacking in Maugham's wit, is imbued with a sense of social consciousness which continues to emerge periodically in all drug literature after. In *Narrow Corner*, an English doctor grows despondent and takes to the practice of opium smoking as a way of detaching himself from the woes of the Depression. He eventually retreats from all of his social obligations as a doctor and becomes an expensive nursemaid to a rich man in the Malay Archipelago.

With the advent of World War II, there was a frenzy for government research in pharmaceuticals. At the Sandoz laboratories in Switzerland, Dr. Albert Hofman took the first "acid trip" in 1943 when he accidentally ingested some d-lysergic acid diethylamide tartrate 25. Throughout Europe and the Pacific, U. S. soldiers became familiar with various types of narcotics, both in the form of painkillers and exotic thrills. And shortly after the war ended the literature of the contemporary drug culture began: *The Man with the Golden Arm* (1949), *On the Road* (begun in 1951), *The Invisible Man* (1952) and *Junkie* (1953).

The focal point of drug literature in the 1950's is undoubtedly William Burroughs' *Naked Lunch*. The victim of censorship trials, this work has most often been written about (by Norman Mailer, Allen Ginsberg, Susan Sontag, et, al.) as a book dealing primarily with homosexuality. However, Frank D. McConnell offers a corrective perspective. Analyzing Burroughs' character of the addict, McConnell gives us insight into the thematic connections with the nineteenth century:

In the simplest terms, of course, the junky himself is an invention of the Romantic era. This disreputable, shabby, compulsive wanderer carrying his mysterious and holy wound is a figure first incarnated in the alcoholic Burns or in the mad Chatterton who so fascinated Wordsworth, and brought to a nearly final development in Coleridge himself...It is only after the Romantics had taught us the impossibility of a transubstantiation of things from above, that the negative eucharist of the outlaw and the sensualist became an aesthetic possibility. (McConnell, p. 672.)

This "aesthetic possibility" takes shape in the existential life of the addict. Here we must differentiate between literature in which addicts serve simply as exotica or representatives of social problems and the true "literature of addiction" which immerses the reader in the drug experience through story and prose technique. The Man with the Golden Arm, with its naturalistic study of the addict as anti-hero, fits into the former mode, as does even Burroughs' first book, *Junkie*. The "literature of addiction" is reserved for the likes of Samuel Coleridge, Thomas De Quincey, Malcolm Lowry, and William Burroughs.

This is, we should note, an experiential tradition, in which the validity of the writer's information, his life, gives weight to his drug metaphors. Yet ultimately, the drug writer is clearly concerned with the communicative function of all literature:

Those who are not addicted should really find *Naked Lunch* no less accessible than those who are—in fact, most of those who prize the book as secret cult-knowledge actually belong to a movement toward the non-addictive hallucinogens and marijuana which has less to do with the imaginative energy of *Naked Lunch* than the "straight" attitude toward drugs. The "hallucinations" which make up the bulk of the book are not the futuristic and numinous visions reported by users of LSD, but are rather clarified visions of present reality made more terrible by what we have already described as the addict's absolute dependence on real things in their aspect of maximum power. (McConnell, p. 675.)

Out of the San Francisco Renaissance of 1956-1957, an existential vision of reality was shaped by writers such as Ginsberg, Corso, Ferlinghetti, Gold, Kerouac, and Trocchi. This is summarized most simply in *The Connection*, Jack Gelber's off-Broadway play which was both a harshly realistic experience and an allegory. Like characters in the developing Theatre of the Absurd, the junkies in this play and in the books of the era live a life of no exit; they exist in tight, self-contained worlds of their own creation, existential men carving a separate reality out of nothingness with the hypodermic needle. Or to put it in Burroughs' own words, from *Junkie*, "Junk is not, like alcohol or weed, a means to increased enjoyment of life. Junk is not a kick. It is a way of life." (Burroughs, p. 128.)

Summing up the image of the junkie from the literature of this era, Marcus Klein writes:

It is not the junkie but the junkie's fabulous shadow that is news. The life of the drug, retreat under discipline ("There is no more systematic nihilism than that of the junkie in America."—Trocchi), might be a metaphor that will tell us who we are (our own poisoned blood; waiters who wait for another round of waiting); where we are (Nowhere, man; Heaven, man); where we are going ("One is no longer grotesquely involved in the becoming. One simply is."—Trocchi. "Running out of veins and out of money."—Burroughs); how to live (a man has his freedom; you can be very cool man; you don't have to live). And these matters are important. In a time of confusions and staggering possibilities of treachery, of engineered ideas and disillusion in the areas of volition and purpose, these metaphysical matters are imperative. (Klein, p. 364.)

Yet as literature rounds the bend of the decade of the 'sixties, it finds itself already outdistanced by the emerging counter-culture. The experiential fascination of drug literature has turned into experiential politics and social philosophy: while underground manufacturers of LSD such as Owsley Stanley

stamp out pads of LSD for an hallucinogenic generation in the Haight-Ashbury, the imagery of the 'sixties is played out not in novels but in motion pictures like *Easy Rider* and *2001*, psychedelic light shows, and the pulsations of the Beatles, the Stones, and the Grateful Dead.

The drug literature popular in this era is typified by mind trips such as Herman Hesse and Tolkien and nonfiction experiential reports, such as Carlos Castaneda's *Teachings of Don Juan*, or Tom Wolfe's *Electric Kool-Aid Acid Test*. This complicated transitional era in drug literature is probably best analyzed by Theodore Roszak in "The Counterfeit Infinity", a chapter of *The Making of a Counterculture*, in which he utilizes Coleridge's rejection of science and objective consciousness to explain a philosophy of 1960's drug culture.

The contemporary excursions into drug literature are fragmented into continuations of the Romantic tradition, writers of the experiential vogue, new moralists, and commercial exploiters of a social phenomenon. Certainly the novels cited in the accompanying bibliography written by Richard Farina, James Leo Herlihy, and Gurney Norman reach out for new versions of the politics of ecstasy. Their joy-tripping is not always without moral judgment, but its central thrust is in the central pleasures of life enhanced by drugs. Hunter Thompson's *Fear and Loathing in Las Vegas* (1971) or Joan Didion's *Play It As It Lays* (1970) recreate those tight, subjective existential worlds of the 'fifties junkies that more closely fit the "literature of addiction" pattern discerned by McConnell.

In Thompson, the modality of drug lunacy has not the purist aspects of heroin addiction, but rather embraces the entire spectrum of uppers, downers, drugs and alcohol that are available:

The sporting editors had also given me \$300 in cash, most of which was already spent on extremely dangerous drugs. The trunk of the car looked like a mobile police narcotics lab. We had two bags of grass, 75 pellets of mescaline, five sheets of high-powered blotter acid, a salt shaker half full of cocaine, and a whole galaxy of multi-colored uppers, downers, screamers, laughers. . . and also a quart of tequila, a quart of rum, a case of Budweiser, a pint of raw ether and two dozen amyls. (Thompson 1971, p. 7)

Through the nightmare combination of all these drugs, Thompson gives us a frighteningly realistic vision of Las Vegas in both physical and psychological terms. Similarly, in 1972 he followed the presidential campaigns in a drug haze, reporting to us through his hallucinations and distortions one of the best nonfiction accounts of how that crucial political game was played in *Fear and Loathing on the Campaign Trail*.

The ultimate frontier of the mind, offering a new reality to explore beyond the parameters of our humdrum existence, beckons for writers in the 1970's. In an essay on the drug counter-culture entitled "The New Mutants", Leslie Fiedler examines the literature and life style of this generation with a look at the new social psychiatry of R. D. Laing in the context of William Burroughs' works:

. . . poets and junkies have been suggesting to us that the new world appropriate to the new men of the latter twentieth century is to be discovered only by the conquest of inner space: by an adventure of the spirit, an extension of psychic possibility, of which the flights into outer space—moonshots and expedition to Mars—are precisely such unwitting metaphor and analogue as the voyages of exploration were of the earlier breakthrough into the Renaissance, from whose consequence the young seek now so desperately to escape. (Fiedler, p. 399.)

The co-existent themes of exploration and escape bring us nearly full cycle in the tradition of drug-related literature. Those Romantic plunges into exoticism, resulting in the aesthetics of Baudelaire, are being repeated by middle-brow writers of the 1970's such as Jacqueline Susann in *Valley of the Dolls*,

with perhaps not the same quality of literary result. As the Romantic attempted to transcend the Industrial Revolution so our contemporary writer, particularly those from the counter culture—Ken Kesey, Hunter Thompson, Theodore Roszak—are reaching for an ecological paradise outside of our polluted world of capitalism and technology. And after two decades of literature celebrating the junkie or drug-user life-styles, we are returned to an understanding of drug experience which is virtually as "magical" as that of the medieval exorcist.

It is the integration of the drug-user into society, the dooper as Everyman, that opens a new phase of drug literature in the contemporary era. And it is in this newfound representative role that the drug literature of contemporary America may ultimately play a significant part as a mirror of our culture. Unlike the traditionally outcast black magician or the black jazz musician, we come to identify with the drug taker in contemporary writing as on a trip for all of us: an astronaut of inner pace.

ON STANDING WITH SAUDI ARABIA (2018)

by Donald John Trump

Published by the White House on November 20, 2018

America First!

The world is a very dangerous place!

The country of Iran, as an example, is responsible for a bloody proxy war against Saudi Arabia in Yemen, trying to destabilize Iraq's fragile attempt at democracy, supporting the terror group Hezbollah in Lebanon, propping up dictator Bashar Assad in Syria (who has killed millions of his own citizens), and much more. Likewise, the Iranians have killed many Americans and other innocent people throughout the Middle East. Iran states openly, and with great force, "Death to America!" and "Death to Israel!" Iran is considered "the world's leading sponsor of terror."

On the other hand, Saudi Arabia would gladly withdraw from Yemen if the Iranians would agree to leave. They would immediately provide desperately needed humanitarian assistance. Additionally, Saudi Arabia has agreed to spend billions of dollars in leading the fight against Radical Islamic Terrorism.

After my heavily negotiated trip to Saudi Arabia last year, the Kingdom agreed to spend and invest \$450 billion in the United States. This is a record amount of money. It will create hundreds of thousands of jobs, tremendous economic development, and much additional wealth for the United States. Of the \$450 billion, \$110 billion will be spent on the purchase of military equipment from Boeing, Lockheed Martin, Raytheon and many other great U.S. defense contractors. If we foolishly cancel these contracts, Russia and China would be the enormous beneficiaries – and very happy to acquire all of this newfound business. It would be a wonderful gift to them directly from the United States!

The crime against Jamal Khashoggi was a terrible one, and one that our country does not condone. Indeed, we have taken strong action against those already known to have participated in the murder. After great independent research, we now know many details of this horrible crime. We have already

sanctioned 17 Saudis known to have been involved in the murder of Mr. Khashoggi, and the disposal of his body.

Representatives of Saudi Arabia say that Jamal Khashoggi was an “enemy of the state” and a member of the Muslim Brotherhood, but my decision is in no way based on that – this is an unacceptable and horrible crime. King Salman and Crown Prince Mohammad bin Salman vigorously deny any knowledge of the planning or execution of the murder of Mr. Khashoggi. Our intelligence agencies continue to assess all information, but it could very well be that the Crown Prince had knowledge of this tragic event – maybe he did and maybe he didn’t!

That being said, we may never know all of the facts surrounding the murder of Mr. Jamal Khashoggi. In any case, our relationship is with the Kingdom of Saudi Arabia. They have been a great ally in our very important fight against Iran. The United States intends to remain a steadfast partner of Saudi Arabia to ensure the interests of our country, Israel and all other partners in the region. It is our paramount goal to fully eliminate the threat of terrorism throughout the world!

I understand there are members of Congress who, for political or other reasons, would like to go in a different direction – and they are free to do so. I will consider whatever ideas are presented to me, but only if they are consistent with the absolute security and safety of America. After the United States, Saudi Arabia is the largest oil producing nation in the world. They have worked closely with us and have been very responsive to my requests to keeping oil prices at reasonable levels – so important for the world. As President of the United States I intend to ensure that, in a very dangerous world, America is pursuing its national interests and vigorously contesting countries that wish to do us harm. Very simply it is called America First!

This work is in the public domain in the United States because it is a work of the United States federal government (see 17 U.S.C. 105).

THOUGHTS ON THE RELIGIOUS INSTRUCTION OF THE NEGROES OF THIS COUNTRY (1848)

by William S. Plumer D.D.

SAVANNAH:
EDWARD J. PURSE, PRINTER,
No. 102 Bryan-Street—Up Stairs.

1848.

Many centuries ago, a holy seer said, "Ethiopia shall soon stretch out her hand unto God." In view of the fulfilment of this prophecy, the royal bard called for a song of universal praise. The words next succeeding this prediction are, "Sing unto God, ye kingdoms of the earth: O sing praises unto the Lord." The writings of Jeremiah inform us who the Ethiopians were, when he speaks of them as contra-distinguished from the rest of the race by their colour, as the leopard is from the rest of the feline tribe by his spots.

The first step in the providence of God towards an amelioration of the spiritual condition of the negro race was their dispersion among other races of mankind. This work, both cruel and bloody, had not been completed, when Christian philanthropy, ever vigilant, sought them out in bondage, and bore to them the cup of divine consolation, which the gospel offers to all, and especially to the sons of sorrow. As early as the year 1732, the United Brethren commenced missions to the negroes in the Danish West Indies, viz., St. Thomas, St. Croix, and St. Jan. In 1754 they began their labours in Jamaica: in 1756 in Antigua: in 1765 in Barbadoes: in 1775 in St. Kitts: in 1790 in Tobago. In 1735 they began their labours among the free negroes of Surinam, and in 1736 they commenced a mission in South Africa. The same zeal led the same people to labour amongst the slaves at and near Paramaribo. One mission was at Paramaribo and one at Sommelsdyke. The difficulty of establishing the first missions among the negroes can scarcely now be conceived. This difficulty was neither blindly contemned, nor timidly feared. With a zeal which Christ knows how to reward, "two of the Brethren at Hernhutth offered to sell themselves as slaves, should they find no other way of obtaining an opportunity of instructing the negroes." In almost every instance some ignorant or viciously disposed persons chose to misunderstand and misrepresent the [Pg 4]object and tendency of this missionary labour; and thus at first opposition was frequently violent. But in every case this hostility was found to be unreasonable and died away. Thus in St. Thomas through the bitterness of some, of whom better things might have been expected, the missionaries were at one time imprisoned for fifteen weeks; but soon after the governor and most of the planters on the island were convinced, by experience, that the instruction of the negroes in the principles of religion, instead of impairing, promoted the interests of their masters; and therefore they were pleased to see their slaves attend on the preaching of the gospel. Thus also in St. Croix, when a dangerous plot was discovered among the slaves, who had bound themselves to murder all the white people on the island in one night, certain malicious persons reported, that some of the negroes baptised by the missionaries were concerned in this conspiracy; but their ignorance was soon vindicated by the criminals themselves. As long as the disturbances lasted, the Brethren by the governor's advice, omitted the large meetings of the negroes; and when he authorized them to begin them again, he and some other gentlemen were present and encouraged the negroes in their attendance. On another occasion when an order was issued that no negro should be seen on the streets or roads after seven o'clock in the evening, he made a regulation that such negroes as had attended the meetings of the Brethren, and could produce a certificate to that effect, signed by their teacher, should pass unmolested by the watch. Such was the confidence the governor placed in the missionaries, and the slaves under their care. Indeed it has invariably occurred in the missions to these people that the planters have perceived the good effects of their labours on the slaves, and found it in every respect best to have the gospel preached upon their estates. While on this general subject, it may be proper to assert what none will or can with truth deny, viz., that no class of negroes well instructed in Christianity, and connected with churches under the care of white pastors, have ever been engaged in any insurrectionary disturbances. Thus the poor, miserable fanatic, who a few years ago headed a band of drunken murderers in one of the counties of Virginia, was not himself a member of any Christian church; nor had he any follower who had ever received sound and systematic religious instruction; or was connected with any church having a white man for a pastor or teacher. So also in reference to the plot of 1822 in Charleston, S.C., the coloured members of the Methodist Episcopal Church were by report accused of some participation. But the Hon. Charles Cotesworth Pinckney, Lieutenant Governor of the State, and himself not a Methodist, in his address before the Agricultural Society[Pg 5] of South Carolina, says; "On investigation it appeared that all concerned in that transaction, except one, had seceded from the regular Methodist Church in 1817, and formed a separate establishment, in connection with the African Methodist Society in Philadelphia; whose Bishop, a coloured man, named Allen, had assumed that office being himself a seceder from the Methodist Church of Pennsylvania. At this period, Mr. S. Bryan, the local minister of the regular Methodist Church of Charleston, was so apprehensive of sinister designs, that he addressed a letter to the City Council, on file in the Council Chamber, dated 8th November, 1817, stating at length the

reasons of his suspicion." In proof of the importance of Christianizing the negroes, even in a political point of view, it is not unworthy of notice, that soon after the commencement of the war between England and France during the last quarter of the last century, the governor of Tortola received information, that the French inhabitants of Guadaloupe meditated a descent on the island. He immediately sent for Mr. Turner, the superintendant of the Methodist Missions in Tortola and the other Virgin Islands, and having informed him of this report, added that there was no regular force in the colony to defend it against the enemy, and that they were afraid to arm the negroes unless he would put himself at the head of them. Mr. Turner was sensible that such a step was not properly within the line of the ministerial office; but considering that the Island was in imminent danger, that if it were conquered by the French, the religious privileges of the negroes would probably be lost, and that the war on their part was purely defensive, he consented to the governor's request, and was accordingly armed with the negroes. About a fortnight after, a French squadron made its appearance in the bay; but being informed, it is supposed by some emissaries, of the armed force on the Island, it abandoned its design and retired. Soon after this the Governor-general of the Leeward Islands sent an order to the Methodist Missionaries to make a return of all the negroes in their societies who were able to carry arms. The return was accordingly made; and a great part if not the whole of them were armed for the defence of the several Islands. Such was the confidence the Governor-general had in the loyalty of the missionaries and their flocks. Let these facts suffice, especially as there are none on the other side, respecting the safety of teaching the negroes to know and love God. Another great difficulty, which the Brethren met in their missions among the negroes was the unhealthiness of the climate. Thus many of them scarcely arrived on the islands, when they[Pg 6] were attacked by diseases, which in a short time put a period to their labours and their lives. Thus from the commencement of the mission in the Danish Islands in 1732 to the year 1766 (or in thirty-four years) no fewer than sixty-six Brethren and Sisters died in St. Thomas, St. Croix and St. Jan. But though the mortality was so great, it is surprising with what cheerfulness others came forward to fill the ranks of those, who had so prematurely fallen. Bishop Spangenburg informs us, that on one occasion when it was made known to the congregation at Bethlehem in Pennsylvania, that five persons had died within a short time on the Island of St. Thomas, no fewer than eight Brethren voluntarily offered, that very day, to go thither and replace them. Disease and death as they did not dishearten them, so neither ought they to dishearten us in this work, even if they stared us in the face. The Brethren had often great difficulties, with regard to the marriages of slaves, even after their baptism. When a planter in the West Indies, for instance, died in debt, his slaves and other property were sold at auction; and in these cases, part of the negroes were frequently purchased by proprietors from other islands, by which means it not only often happened that parents and children, but husbands and wives were forever parted from each other. How to act in such circumstances, the Brethren were at first quite at a loss, and they appear for some time to have prohibited the converts from contracting another marriage, apprehending this to be inconsistent with the principles of Christianity. Now, however, though they do not advise, yet neither do they hinder a regular marriage with another person, especially if a family of children, or other circumstances, seem to render a helpmate necessary. The course of the English Baptist Missionaries in the east, on the same subject, may properly be here stated. Among the trials which their converts had to endure, their situation in respect to marriage was not the least considerable. In some cases the converts were obliged at the time of their conversion to forsake their homes, their friends, and even the wife of their bosom, nor would she afterwards have any correspondence with them, or if willing herself she was forcibly prevented by her relations. By this means they were to all intents and purposes reduced to a state of widowhood, and were in no small danger of falling into sin. It therefore became a question among the Missionaries, whether it was not lawful for a person in such circumstances to marry a second wife, while the first was still living, after he had in vain employed all possible means to induce her to return to him and not being able to recover her, had taken some public and solemn measures to acquit himself of the[Pg 7] blame. This question they at length resolved

in the affirmative. A decision involving the same principles, as those referred to in the case of the removal or estrangement of a husband or wife was had in the Synod of North Carolina at its sessions at Salisbury in the year 1827, whereby it was declared that the wife of a member of the church being sold to the far south-west, and having herself married again, the husband was at liberty to marry again. Notwithstanding the difficulties before stated and many similar ones, the Great Head of the Church greatly blessed the labours of the Brethren; so that in 1833 they had in the Danish Islands 7 settlements with 36 missionaries, and 9435 negroes, of whom about 4000 were communicants. In Jamaica, 7 settlements, 20 missionaries, 5146 negroes, of whom 1478 were communicants. In Antigua, 5 settlements, 23 missionaries, 14,362 converts, and 5442 communicants. In St. Kitts, 3 settlements, 10 missionaries, 5035 converts, and 1137 communicants. In Barbadoes, 2 settlements, 6 missionaries, 1374 converts and 282 communicants. In Tobago, 1 settlement, 4 missionaries and 253 in the congregation. In Surinam, after 99 years labour, they had 1 settlement, 16 missionaries, 3353 converts and 1200 communicants. In South Africa, after labouring 98 years but with a long interruption, they had 6 stations, 38 missionaries, 2963 converts and 1043 communicants. They have also one settlement in Paramaribo, and one in Sommelsdyke. The general summary view of these missions then gives us about thirty-five stations, one hundred and fifty missionaries—having in their congregations and under catechetical instruction about forty-two thousand souls, most, if all of whom profess conversion, and have been baptised—of whom about fifteen thousand are communicants. These statistics come down only to the year 1833. Since that time most of the missions have had great success, but we have not complete statistics at hand. In the foregoing statements, one fact of great importance is brought to light, viz.: that the gospel, as dispensed by the Moravians, has, other things being equal, been more successful among slaves than among free negroes. So that the civil condition of these people cannot be pleaded against an honest discharge of our duty to them. Though the United Brethren need the testimony of no man to the importance and utility of their labours; yet as the authority of Bryan Edwards, Esq., may have some influence with persons of a certain description, who are prejudiced against missionary exertions in general, we shall here subjoin a short extract from the work of that writer: "It is very much," [Pg 8] says he, "to the honour of the legislature of Antigua that it presented to sister islands the first example of the amelioration of the criminal law respecting negro slaves, by giving the accused party the benefit of trial by jury, and allowing in case of capital conviction, four days between the time of sentence and execution. And it is still more to the honour of Antigua, that its inhabitants have encouraged in a particular manner, the laudable endeavours of certain pious men, who have undertaken, from the purest and best motives, to enlighten the minds of the negroes, and to lead them to the knowledge of religious truths. In the report of the lords of the committee of council on the slave trade, is an account of the labours of the society known by the name of the Unitas Fratrum, commonly called Moravians, in this truly glorious pursuit; from which it appears that their conduct in this business displays such sound judgment, breathes such a spirit of genuine Christianity, and has been attended with such eminent success, as to entitle its Brethren and missionaries to the most favorable reception from every man, whom the accidents of fortune have invested with power over the poor Africans, and who believe (as I hope every planter believes) that they are his fellow-creatures, and of equal importance with himself in the eyes of an all-seeing and impartial Governor of the Universe."—Edward's History of the West Indies. Vol. 1, page 487. Fourth Edition. In the autumn of 1786 the Rev. Dr. Coke, accompanied by three other Methodist preachers, destined for Nova Scotia, sailed from England for that country, but after being ten weeks at sea, the violence of the gales, a leak in the ship, and apprehensions of the want of water, forced the captain to change his course, and bear off for the West Indies. Having landed on the island of Antigua, the Dr. and his companions resolved, that, instead of proceeding to the original place of their destination, they would attempt to begin a mission on this and some of the neighboring islands. Of these establishments we shall now give a short account. In the course of their labours the Methodist Missionaries established missions among the slaves in Antigua—in Dominico—in St. Vincents—in St. Kitts—in St. Eustatia—in Nevis—in Tortola and the Virgin

Islands—in Jamaica—in Barbadoes—in St. Bartholomews—in Grenada—in Trinidad—in St. Thomas—in New Providence—and the other Bahama Islands. In these labours the Methodists often met with little encouragement. Thus in Nevis many of the most opulent planters at first opposed the design, from an apprehension that it would introduce a spirit of insubordination among the negroes. Hence for a considerable time they would not permit[Pg 9] the Methodists to have access to the slaves on their estates; and when some at length ventured to invite them, they observed the utmost caution in their manner of proceeding: and in some instances, the missionaries, after having preached a few times, were discarded, without being informed of any reason for such a singular mode of treatment. They were rarely however without employment. When dismissed from one plantation they were solicited to visit others, and after a short season were treated in the same manner as they had been before. In Jamaica, matters were still more unpleasant. A number of the white people at Kingston, soon after the opening of a chapel became so riotous that it was impossible in the evening to meet for the worship of God in peace, both the preacher and hearers being often in danger not only of mischief, but of losing their lives. Mobs and riots were raised against the missionaries. Their chapel was presented as a nuisance. The chapel was stoned—its gates were torn down. Similar outrages were committed at Morart Bay about 30 miles from Kingston. Opposition rose even higher, and the Assembly of Jamaica began the work of legislative persecution and carried it on with great zeal, but not being supported by the Crown, they were not able to accomplish all their purposes, though much inconvenience and even suffering followed. This opposition has continued, until within the last twelve or fifteen years, against the labours of these people, notwithstanding the law was fairly on their side. Yet were they not disheartened so as to abandon a field, where God had been with them from the first. And now we can all see how a gracious God has overruled all these things for good. The Anniversary of the Wesleyan Missionary Society in 1834 was attended with an unusual degree of thankfulness on account of the cessation of this opposition and the readiness of the people to hear the word of God. What has been the entire success of their labours up to this date is not known. But in 1811, twenty-five years from the commencement of the first missions in the Islands, there were 27 missionaries, and between 11,000 and 12,000 converts. That the number both of missionaries and converts has been more than doubled since that time is at least very probable. In reference to the good effects of these missions, one, who may be regarded both as a competent and credible witness says: "Among the members of the Methodist societies in the West Indies, there are not a few, we hope, who are sincere converts to the Christian faith, though we fear there is a considerable tincture of enthusiasm among them. All of them so far as is known fulfil with propriety, the relative duties of life, even their own masters being judges, or if any occasionally[Pg 10] transgress the rules of morality, they are excluded from the connection, at least after neglecting due reproof. They have abandoned the practice of polygamy, the besetting sin of the negroes; and the fatal influence of Obeah or witchcraft, which is often productive of the most terrible mischief, among the slaves, is effectually destroyed wherever Christianity prevails. As a proof of the general good conduct of the converts, it is not unworthy of notice, that when an office which requires trust and confidence becomes vacant, such as that of a watchman, it is a usual practice with the planters and managers to enquire for a religious negro to fill it. Indeed in Antigua, Nevis, Tortola and St. Vincent's, the proprietors of estates, and the other inhabitants, are so fully satisfied with the conduct of the missionaries, and so sensible of the political, as well as moral and religious advantages resulting from their labours, that they entirely support the missions in the island by their voluntary contributions." The London Missionary Society has also laboured in this field to a limited extent. In 1807 they established a mission on the river Demarara in Surinam, in South America. This mission from the first was encouraging. Many attended the preaching. Many came asking in the greatest earnestness, the way of salvation. The intemperate were reformed, and "some whom the whip could not subdue for years, the gospel subdued in a few months." Prejudice and opposition here were never violent and soon gave way. A place of worship was soon erected, at which not less than 400 generally attended. A credible witness says: "Perhaps a more attentive congregation was never seen." Ungodly men testified to the good

effects of this work. They declared what every

Christian would expect, viz.: that the reception of the gospel made the indolent, industrious, the noisy, quiet, the rebellious, obedient, the ferocious, gentle. The great promoter of this mission was a rich planter, whose name was Post, and to whom it occurred as it often does to others, that his labours and expenditures seemed to be much more blessed to the slaves on the neighbouring plantations than to his own. The same society has established a mission at Berbice, a neighboring colony, which is highly favoured. They had 14 years ago an immense chapel at Georgetown, attended by great numbers of people of different colours, among whom were supposed to be more than a 1000 negroes. At this place the slaves esteemed it a privilege to contribute to the funds of the Missionary Society. Did time permit, we might also give some account of the labours of the "Society for the conversion and religious instruction of the Negroes in the West India Islands." But[Pg 11] there is nothing very peculiar or marked in its history. We therefore pass on to notice missions among the slaves in the United States. Of those who have laboured in this field in our own country, the earliest, that are known, were the United Brethren. The associates of Dr. Bray, a gentleman in England, who had by his last will made some provision for the conversion of the negroes in South Carolina, having solicited Count Zinzendorf to send some missionaries to that colony, the Brethren, Peter Boehler and George Schulcus, were sent thither in the year 1738. In consequence however of the sinister views of those who ought to have assisted them, they were hindered from prosecuting the great object of their mission. Both of them, indeed, soon fell sick. Schulcus died in 1739; and Boehler, who was at the same time minister of the colony of the Brethren in Georgia, retired with these to Pennsylvania, in consequence of being required to carry arms in the war that was carried on against the Spanish. The next labourers, so far as known, in this field were Rev. Samuel Davies, afterwards President of Nassau Hall, and Rev. John Tod, of Hanover Presbytery in Va. Mr. Davies began his ministry in Hanover in 1747, and in 1755 he gives the following account in a letter to a member of "the Society in London for promoting Christian Knowledge among the poor." "The inhabitants of Virginia are computed to be about 300,000 men, the one-half of which number are supposed to be negroes. The number of those who attend my ministry at particular times is uncertain, but generally about 300, who give a stated attendance; and never have I been so struck with the appearance of an assembly, as when I have glanced my eye to that part of the meeting-house where they usually sit, adorned, for so it appeared to me, with so many black countenances eagerly attentive to every word they hear, and frequently bathed in tears. A considerable number of them (about five hundred) have been baptised, after a proper time for instruction, and having given credible evidences, not only of their acquaintance with the important doctrines of the Christian religion, but also a deep sense of them upon their minds, attested by a life of strict piety and holiness. As they are not sufficiently polished to dissemble with a good grace, they express the sentiments of their souls so much in the language of simple nature, and with such genuine indications of sincerity, that it is impossible to suspect their professions, especially when attended with a truly Christian life and exemplary conduct. My worthy friend, Mr. Tod, minister of the next congregation, has near the same number under his instructions, who, he tells me, discover the[Pg 12] same serious turn of mind. In short, sir, there are multitudes of them in different places, who are willing and eagerly desirous to be instructed, and embrace every opportunity of acquainting themselves with the doctrines of the gospel, and though they have generally very little help to learn them to read, yet to my agreeable surprise many of them, by dint of application at their leisure hours, have made such progress that they can read a plain author intelligibly, and especially their Bibles, and pity it is that any of them should be without them. Some of them have the misfortune to have irreligious masters, and hardly any of them are so happy as to be furnished with these assistances for their improvement. Before I had the pleasure of being admitted a member of your society, they were wont frequently to come to me with such moving accounts of their necessities in this respect, that I could not help supplying them with books, to the utmost of my small abilities; and when I distributed those among them which my friends, with you, sent over, I had reason to think that I never did an action in all my life that met with so much gratitude

from the receivers. I have already distributed all the books that I brought over, which were proper for them. Yet still on Saturday evenings, the only time they can spare, my house is crowded with numbers of them, whose very countenances still carry the air of importunate petitioners for the same favours with those who came before them. But, alas! my stock is exhausted, and I must send them away grieved and disappointed. Permit me, sir, to be an advocate with you, and by your means, with your generous friends in their behalf. The books I principally want for them are Watts' Psalms and Hymns, and Bibles. The two first they cannot be supplied with in any other way than by a collection, as they are not among the books your society give away. I am the rather importunate for a good number of these, as I cannot but observe that the negroes above all the human species that I have ever known, have an ear for music, and a kind of ecstatic delight in psalmody; and there are no books they learn so soon, or take so much pleasure in, as those used in that heavenly part of divine worship. Some gentlemen in London were pleased to make me a private present of these books for their use; and from the reception they met with, and their eagerness for more, I can easily foresee how acceptable and useful a larger number would be among them. Indeed, nothing would be a greater inducement to their industry to learn to read, than the hope of such a present, which they would consider both as a help and a reward to their diligence." Having obtained a further supply of books from London for the negroes, Mr. Davies, in a[Pg 13] letter to the same gentleman, gives the following account of the manner in which they were received by them. "For some time after the books arrived, the poor slaves, whenever they could get an hour's leisure from their masters, would hurry away to my house, to receive the charity with all the genuine indications of passionate gratitude, which unpolished nature could give, and which affectation and grimace would mimic in vain. The books were all very acceptable, but none more so than the Psalms and Hymns, which enable them to gratify their peculiar taste for Psalmody. Sundry of them lodged in my kitchen all night, and sometimes when I have awaked about two or three o'clock in the morning, a torrent of sacred harmony poured into my chamber, and carried my mind away to heaven. In this seraphic exercise, some of them spend almost the whole night. I wish, sir, you and their other benefactors could hear any of these sacred concerts. I am persuaded it would surprise and please you more than an oratorio or St. Cecilia's day." Mr. Davies afterwards adds, that two Sabbaths before, he had the pleasure of seeing forty of them around the table of the Lord, all of whom made a credible profession of Christianity, and several of them with unusual evidence of sincerity; and that he believed there were more than a thousand negroes who attended upon his ministry at the different places where he alternately officiated.—Gillies' Historical Collections, Vol. I, p. 334; Appendix to the Historical Collections, p. 29, 37, 40, 42. The labours of the Rev. Robert Henry seem to have been blessed much to the negroes in Virginia. The centre of his operations was Cub-Creek, in Charlotte county. Mr. Henry was succeeded by Rev. Drury Lacy of precious memory. We have seen a letter dated July 14th, 1834, which says, "During Mr. Lacy's ministrations at Cub-Creek, there were about 200 black members added, and there were 60 belonging to Mrs. Coles alone. Several black elders were appointed and set apart to superintend those black members." Mr. Lacy was succeeded by Rev. John H. Rice, D.D. He, says the same letter, "did but little in that cause, as it began to decline as soon as Mr. Lacy ceased his labours in Charlotte." Yet the old records of the General Assembly, and of the General Assembly's Board of Missions show that his labour was not in vain in the Lord. In 1807 Hanover Presbytery addressed a circular to the churches under their care, solemnly exhorting them not to neglect their duty to their servants.[1] [1] Virginia Magazine, Vol. III. p. 159. About the time of the labours of Mr. Henry at Cub-Creek, the Rev. Henry Patillo, pastor of Grassy Creek and Nutbush churches in Granville county, North Carolina was labouring[Pg 14] successfully among the same class of people. But we are unable to give particulars. Of one thing however we are well certified, and that is that the good effects of his labours have not ceased to be felt extensively to this day. Dr. Semple's history of the Baptists in Virginia, contains many evidences that from the earliest beginnings of that branch of Christ's church in the South, the salvation of the negroes has not been forgotten or slighted in their ministrations. Indeed the vast numbers connected with their churches show that they have laboured much among them. Very

soon after the Methodists began to preach in the United States, the negroes claimed much of their attention.

As early as the year 1804, the Methodists had in the United States 23,531 coloured members, of whom most were slaves. Since that time their numbers have been almost incredibly increased. For besides their regular system of itineracy, they have for some years had very flourishing Plantation Missions, especially in South Carolina and Georgia. The testimony in favour of their labours is not to be found merely in their own official reports, veritable as no doubt they are; but in the increasing desire of planters of all denominations and of no denomination of Christians to have their slaves instructed by them. The Hon. C. C. Pinckney in the address previously referred to, says: "On a plantation in Georgia, where in addition to superior management, the religious instruction of the blacks is systematically pursued, the crops are invariably the best in the neighborhood. The neatness and order which the whole establishment exhibits, prove that the prosperity of the master, and the best interests of the negro are not incompatible. The same state furnishes another instance of this position. The people of an absentee's plantation, were proverbially, bad from the abuse and mismanagement of an overseer, (the proprietors residing in England and the attorneys in Carolina.) The latter dismissed the overseer as soon as his misconduct was discovered, and employed another who was a pious man; he not only instructed the negroes himself to the best of his abilities, but accompanied them every Sunday to a Methodist church in the neighborhood. At the end of five years their character was entirely changed, and has so continued ever since. After nearly fifteen years more, the surviving attorney is now in treaty for the purchase of these very negroes, whom he formerly considered as a band of outlaws. Other examples in favour of this plan have occurred in Carolina. In one instance a gentleman invited a missionary to attend his plantation. After some time, two black preachers, who had previously acquired popularity fell into disrepute, and were neglected by their[Pg 15] former congregation. These statements are derived from unquestionable sources. The last case presents a view of the subject, which may have weight with those who think other motives insufficient." The late Bishop Dehon of South Carolina, turned his attention somewhat to this people and not without success. We have spoken thus far of the labours of the dead only. Did time permit, interesting details of the labours of many living men might be given. It has been clearly ascertained that in Virginia, North Carolina, South Carolina, Georgia, and in all the Southern States, there are many who are fired with love to the souls of the dying negroes, and are, with various success labouring for their salvation. It will appear by statements already made, and yet to be made, that all denominations of Christians are fairly pledged to this work, so that they cannot consistently retreat from it. In making the foregoing statements nothing more than an introduction to a great subject was intended. That great subject is our duty respecting the eternal well being of negroes. A friend once inquired respecting President Davies' practice as to the baptism of slave children. We know not what that excellent man's practice was; but we are happy in stating that the highest court in the Presbyterian church has determined in a manner, that is thought satisfactory, all questions on this point. Thus in the minutes of the Synod of New York and Philadelphia for the year 1786, p. 413, it is said: "The following case of conscience from Donnegal Presbytery was overtured, viz.: whether Christian masters or mistresses ought in duty to have such children baptized, as are under their care, though born of parents not in communion of any church? Upon this overture, the Synod are of opinion, that Christian masters and mistresses whose religious profession and conduct are such, as to give them a right to the ordinance of baptism for their own children, may, and ought to dedicate the children of their household to God, in that ordinance, when they have no scruple of conscience to the contrary." On the next page (414) of the same record, it is said that "It was overtured, whether Christian slaves having children at the entire discretion of unchristian masters, and not having it in their power to instruct them in religion, are bound to have them baptised; and whether a christian minister in this predicament ought to baptize them? The Synod determined in the affirmative." Again on the 315 page of vol. iii., containing the minutes of the General Assembly for 1816, is this entry: "The committee to which was referred the following question,[Pg 16] viz.: Ought baptism on the promise of the master, to be

administered to the children of slaves, reported, and their report being amended was adopted, and is as follows, viz.: "1st, That it is the duty of masters who are members of the church, to present the children of parents in servitude, to the ordinance of baptism, provided they are in a situation to train them up in the nurture and admonition of the Lord, thus securing them the rich advantages which the gospel promises. "2nd, That it is the duty of Christian ministers to inculcate this doctrine; and to baptize all children of this description when presented to them by their masters." It is proper here to state that among the most serious obstacles to the spread of the gospel among this people, the use of ardent spirits has long held and does still hold a prominent place. We once heard a slave-holder say that if Abolitionists had stirred up as much rebellion and caused as much bloodshed among the negroes as the retailers of ardent spirits had done, there would long ere this have been a civil war. Nat Turner's insurrection broke out in the region that formerly manufactured vast quantities of apple-brandy. His followers are known to have been highly stimulated with this liquid fire. Indeed, we know a clergyman who for many years has resided and travelled extensively in the South, and who testifies that among scores of negroes under sentence of death whom he has visited, he remembers but two, who were not led to commit the crimes that brought them to such a sentence by some sort of influence arising from strong drink; and in most cases by drinking just before they committed the crime. It gives us pleasure to state that the sound principles of the Temperance reformation are so few, so plain, and so simple, that they are of easy application to this kind of population. Many recent experiments in the South prove the truth of this assertion, and exhibit most blessed effects arising from the introduction of this reformation among them. Let the friends of morality and religion persevere. Drunkenness is the enemy of the black and the white. It destroys both soul and body, in time and eternity. We have in possession a number of printed documents written by good men residing in the South on the subject of the religious instruction of the negroes. One of them is the "Rev. Dr. Richard Furman's exposition of the views of the Baptists relative to the colored population of the United States, in a communication to the Governor of South Carolina," and published at his recommendation. In this document, it is stated that the result of his inquiry and reasoning leads among others to the following conclusions:[Pg 17] "That Masters having the disposal of the persons, time, and labour of their servants, and being the heads of families, are bound, on principles of moral and religious duty to give these servants religious instruction; or at least to afford them opportunities, under proper regulations, to obtain it; and to grant religious privileges to those who desire them, and furnish proper evidence of their sincerity and uprightness. Due care being taken at the same time that they receive their instructions from right sources, where they will not be in danger of having their minds corrupted by sentiments unfriendly to the domestic and civil peace of the community." Page 15. The second document is styled "Practical considerations founded on the Scriptures relative to the slave population of South Carolina," respectfully dedicated to the "South Carolina Association," by a South Carolinian, understood to be the Rev. Dr. Dalcho of the Protestant Episcopal Church in Charleston. The concluding sentence is in these words: "If we are the owners of slaves, our duty to God, to our country, and to ourselves, all urge the necessity of affording them instruction in the gospel of Jesus Christ, the Saviour of the souls of men." pp. 37, 38. Another of these documents, whose author is the Rev. Chas. Colcock Jones, D.D., establishes these principles: That the negroes need the gospel: That God has put it in our power to give them the gospel: That we are bound by humanity, consistency, by the spirit of our religion, and by the express command of God to give them the gospel: That we cannot be excused from this work by pleading that they already and sufficiently have the light of life: Nor by pleading that they are incapable of receiving it: Nor by pleading the little success that has been had in this department: Nor by pleading the great and peculiar difficulties of the case. The next documents are the twelve Annual Reports of the Missionary to the negroes in Liberty County, Georgia, presented to the Association from year to year, and published by order of the Association. These are the most practical and therefore to us the most useful documents in the collection. Passing by the practical matters, we present but one sentence taken from the report of 1833. "The religious instruction of servants is as much a duty as that of children. You are labouring

therefore to discharge a duty; and are to account for the manner in which you discharge it at the bar of God." p. 15. The next

document is: "Report of the committee to whom was referred the subject of the Religious instruction of the colored population, of the Synod of South Carolina and Georgia, at its sessions in Columbia, South Carolina, December[Pg 18] 5th-9th, 1833, and published by order of the Synod." This able document thus enumerates the benefits which will flow from the religious instruction of the negroes, and clearly shows that it will be to our interest. It specifies these things: "There will be a better understanding of the relation of master and servant and of their reciprocal duties: The pecuniary interests of the masters will be advanced as a necessary consequence: The religious instruction of the negroes will contribute to safety: Another benefit is, we shall thus promote our own morality and religion: Much unpleasant discipline will be saved to the churches: The last benefit mentioned is one that we thus convey to the servants instrumentally: It is the salvation of their souls." Another document is the "Pastoral letter of the Rt. Rev. Wm. Meade, Assistant Bishop of Virginia, to the ministers, members, and friends, of the Protestant Episcopal Church, in the Diocese of Virginia, on the duty of affording religious instruction to those in bondage," and published at the request of the Convention of Virginia. This manly and Christian publication shows it to be our duty to seek the salvation of these people because: "The providence of God in sending these people among us in a state of dependence points out to us this duty: The word of God is particular and emphatic on this subject: The benevolence and mercy of the gospel require this of us: Consistency requires this of us." The conclusion urges the performance of this duty from success already had in the work. In the Appendix are to be found some letters and documents of great worth on this great subject. But Dr. Jones seems to be in this department more "abundant in labours" than any other man. We have now his excellent and practical pamphlet on the religious instruction of slaves. We are glad to see it sent forth by our Board of Publication, and in its present form too. We trust it will have an extensive circulation. No man will fail to be better informed who reads it with care. It can for a few cents be transmitted by mail to any part of the United States. Our advice concerning it is given in four words: buy, read, circulate, practice it. The statistics of the negro race in the slave-holding States of this nation are of the most interesting kind. Their increase is prodigious. We cannot go into this matter now, farther than to say that the next census will probably show that the number of negroes and mulattoes in the United States is more than four millions. What an object for Christian love and wisdom and effort! Who will not pray for the salvation of these people? From what has been already said, our minds are fully satisfied of the correctness of the following positions:[Pg 19] I. It is the duty of Christians generally, and of Presbyterians particularly, earnestly to seek the salvation of all the destitute, and especially of the negroes of this country, by such methods as the laws of God require, and in conformity with every proper law of the land, relating to these people. A good police is nowhere adverse to the spread of the gospel. II. On account of the incalculable benefits resulting to the teacher of the plan of salvation, and to him who is taught as well as to masters and the community generally, it is expedient to do this thing and that speedily. III. It is entirely safe to do this. No facts can be established to the contrary, and many can be established in support of this assertion. IV. It is very unsafe not to do it, because all men will have some notions of religion, and if they be not correct notions, they will be erroneous, wild, fanatical, superstitious, or in some way highly dangerous. On this subject we present a short extract from a discourse published by the late Dr. Rice, in the year 1825, on the subject of the injury done to religion by ignorant teachers. In that discourse the writer speaking of fanaticism says: "These remarks have a bearing on a particular part of our population, which I think it my duty to state in such terms that the intelligent will understand me. And that this subject may present itself with greater force it ought to be observed, that there is always a predisposition to superstition, where there are no settled religious principles. This state of the human mind, may be regarded as a predisposition to fanaticism where there is a general prevalence of ignorance and rudeness. Now it is well known that there is a large and increasing part of our population whose ignorance is almost absolute. Their spiritual interests have been very generally neglected; and

attempts to afford them religious instruction have often been frowned upon by men of power and influence. But have they thus been able to suppress the workings of the religious principle? That is impossible. It would be as easy to exclude the light of the sun by a leaf of the statute book. What then has been the result of this very general negligence? Why, thousands of this race have a set of religious opinions of their own in many very important respects at variance with the religion of the New Testament. They have long shown a most observable preference for those meetings, by whomsoever conducted, where there is most noise and vociferation, most to strike on the senses, and least to afford instruction. While some among them are, no doubt, true Christians, many unquestionably are rank fanatics. They are chiefly under the influence of ignorant[Pg 20] spiritual guides. It is most obvious to the careful observer that they are withdrawing more and more from those ministrations, where they can learn the true character of Christianity; and insist with increasing pertinacity, on holding meetings in their own way, and having preachers of their own colour. The profession of religion among them is becoming perceptibly less beneficial: so that in some neighborhoods, this very thing generates suspicion of the professor, rather than confidence in his integrity. The preachers among them, although extremely ignorant, (often unable to read a verse in the Bible or a line in their Hymn book) are frequently shrewd, cunning men. They see what influence misdirected religious feeling gives them over their brethren and they take advantage of it. Many of them feel their importance, and assume the post of men of great consequence. This thing is growing in the Southern country. And while efforts to afford these people salutary instruction have been repressed or abandoned, a spirit of fanaticism has been spreading which threatens the most alarming consequences. Without pretending to be a prophet, I venture to predict, that if ever that horrid event should take place, which is anticipated and greatly dreaded by many among us, some crisp-haired prophet, some pretender to inspiration, will be the ringleader as well as the instigator of the plot. By feigning communications from heaven, he will rouse the fanaticism of his brethren, and they will be prepared for any work however desolating or murderous. The opinion has already been started among them, that men may make such progress in religion, that nothing they can do will be sinful, even should it be the murder of those whom they are now required to serve and obey! The present state of the country presents a prospect truly alarming; and when the rapid growth of our population both black and white is considered, it requires a man of a stout heart indeed, to view the scene without dismay. It is appalling, when such a mighty power as that afforded by the religious principle, is wielded by ignorant and fanatical men. Shall we, then, let this matter alone?"—Evan. and Lit. Magazine, Vol. 8, pp. 603 and 604. How literally this "prediction" was fulfilled in the Southampton insurrection, many remember. A "crisp-haired" fanatic led it on. V. Not only the general course of legislation, but also the general tenor of Providence unite in declaring that the great body of teachers for this people must for the present at least be white men. It is truly marvellous that although Dartmouth College was endowed chiefly as a school, in which to train up Indians for useful stations, yet did that institution never, so far[Pg 21] as is known, furnish more than one or two useful and successful preachers of the gospel from among that people. As early as the year 1693, the Earl of Burlington and the Bishop of London, for the time being, who had been constituted by the great Mr. Boyle trustees of the fund he left for the advancement of Christianity among infidels, directed the proceeds to be paid to the president of William and Mary College in Virginia for the education and instruction of a certain number of Indian children. This charity was continued for more than eighty years; yet did it never raise up a missionary to the Indians. In like manner efforts have been made for the last century to train up useful ministers and missionaries of the negro race for this country. As early as the year 1744 the venerable Dr. Styles and the Rev. Samuel Hopkins undertook the education of two apparently promising negroes with a view to the ministry; but it was finally a failure. Dr. John B. Smith also laboured for the same object but never really served the church in this way. Many other efforts have been made, but generally, though we are happy to say not universally, they have been unproductive of any solid or extensive good. If valuable ministers, therefore, are to be raised up from this people, in our country and in sufficient numbers, it must probably be at least for some time

to come, from amongst white men. VI. If Protestants do not attempt and execute this work, Jesuits will undertake and execute

a most undesirable work among them. Not only the spirit and genius of popery, but also the developments of policy made in the Leopold Reports, put this matter beyond all doubt. The danger and annoyance of such influences may be learned not only from the doctrines of Romanism and the general history of its acts in every nation, where it has prevailed, but also in particular acts in reference to missions. Thus in St. Vincents in the West Indies the Methodist Missionaries attempted to begin a school among the native Caribs, and the legislature of the islands gave an estate for the support of the institution; but the Catholic priests of Martinico infused suspicions into the minds of the poor people, that the missionaries were employed by the King of England, and by this means raised their jealousy to such a pitch, that it was found necessary to withdraw from among them. Among the negroes, however, the Methodists were more successful, and in a short time collected such numbers of them in their societies as amply recompensed them for the failure of their labours among the Caribs. In 1793 the Legislative Assembly of St. Vincents, which had at first patronized the [Pg 22] Methodist Missionaries, passed a very rigorous act against them, prohibiting them from preaching to the negroes under the severest penalties. For the first transgression, it was enacted that the offender should be punished by a fine of £10; for the second, by such corporeal punishment as the court should think proper to inflict, and likewise by banishment; and if the person should return from banishment, by death! The emissaries of the Pope have shown their real feelings in reference to evangelical missions, in their attempts on the Sandwich Islands and in their bitterness after their failure, as also in their more recent and cruel conduct in Otaheite. In the prosecution of the work, it must not be forgotten: 1st. That all that shall be done must be with the consent and under the sanction of proprietors of estates and of slave-holders generally, where the negroes are slaves. 2nd. That the friends of religion should labour to obtain unity of views, sentiments, and purposes amongst all the ministers and churches in our bounds; especially where this population is large. 3d. There must be exercised in the whole matter a sound discretion, and a careful examination of every step. 4th. Also unblenching intrepidity, and Christian firmness. 5th. Untiring perseverance and unceasing effort. 6th. That long patience, which the husbandman hath when he waiteth for the precious fruits of the earth. 7th. Undoubted love to God and to all men. 8th. Correct statistical information of the number of black members in our churches, and hearers in our congregations, should be obtained and published. 9th. A hearty and steady engagedness of private members in all our churches in continual and becoming labours for the salvation of those immediately dependant upon them, should be urged. 10th. Some years ago (in 1833) there was a proposal to organize a general Board or Missionary Society in the South, for the special purpose of conducting this work. At the time we were in favour of such an organization. But it failed from some cause. In the present state of our church, the Board of Missions, (Domestic,) acting as it does through the Presbyteries, and by their advice, is perhaps fully adequate to the work. We see not why they may not do it all, if the churches will but furnish the means, and if proper men can be found. We have spoken of a general Board. Local Associations are and will continue to be in many respects useful and important. Let such be formed, on correct principles wherever it may be useful. A form of a constitution for such an association "auxiliary [Pg 23] to the Board of Domestic Missions" constitutes a valuable part of the Appendix to the pamphlet under review. A friend of ours, who has long felt an interest, and who has through a course of years conducted an extensive correspondence on this subject, has shown us a large number of letters obtained by him for public use from clergymen of high standing in several different denominations, from lawyers, physicians, judges, members of Congress, intelligent planters, officers of public institutions, and others residing in Virginia and Texas, and States lying between them. We find in these letters from men residing far apart a remarkable agreement both in feeling and in judgment. We propose to conclude this article by quoting a few sentences on topics, which we deem of great importance. One says, "From my own experience I should say there is but one obstacle to success, and that is a belief among the slaves, that all scriptural passages which bear upon their peculiar situation,

have been interpolated by white men. How far this notion prevails I cannot say, but I am sure it does to a great extent." Another says, "I cannot conceive how any one, who acknowledges the obligations of Christian duty can decline affording Christian instruction to his slaves. That this duty of instruction may be safely performed, seems to me manifest from the very precepts of Christianity. The whole tenor of the Bible inculcates nothing but what, if practised, must contribute to the common advantage of the parties [master and servant.] The chief source of danger from the negro race consists in keeping them ignorant of the principles of Christianity. My experience in this matter has been sufficient to satisfy me that there is no yeomanry in the world, who would make a better return for the labour of moral instruction, so far as the great leading principles of Christianity are concerned." Another says, "Sermons to coloured people ought to be studied and well prepared. The preacher must by all prudent means enlist public favour. The negroes must be treated with kindness and respect. In giving catechetical instruction, their ignorance and blunders must not be allowed to expose them before their fellows, but must be covered. Their feelings must not be wounded." Another says, "We must guard against the danger of so presenting the subject of religion to the minds of the negroes as to make the operation of their senses and imagination a substitute for the exercise of the right affections of the heart. Such a method of instruction should be adopted as would make a lawful and judicious use of the senses and imagination;[Pg 24] and therefore sermons addressed to them should abound with illustrations taken from common life; a course justified by the parables of our Saviour." Another says, "Undoubtedly Christians ought to engage in this great work without delay. Nothing can be gained by postponement. The moral wretchedness of our coloured neighbours demands immediate relief; and every principle of humanity and religion urges us to afford it. Preaching intended for this class of persons should be on important subjects, as simple as possible, familiar, attractive and solemn." Another says, "I think that our white population is prepared for this work; and I know that many of the negroes are perishing for lack of knowledge. All our churches are doing a little for these too long neglected immortals; but the efforts used bear no just proportion to their numbers and necessities." Another says, "Our Convention appointed a committee to prepare, or collect and publish a series of tracts for the benefit of the slaves, which may be read to them, or by such of them as can read. I trust the scenes, which are enacting in some parts of the north, will convince all our citizens that our first duty is to instruct them in the principles of religion, and not seek to inspire them with lofty notions, which will only rouse up against them the worst feelings of the whites." Two others relate at length how they overcame reluctance in their negroes to attend upon religious instruction. They gave them a part of Saturday for doing those things, which they had formerly done on the Lord's day, as going to a market, &c. They also gave them two or three hours, when preaching could be had during the week. They thus showed that they were willing to lose, (if loss it was) a portion of their time for their spiritual good. "This course soon removed all outward opposition." Another says, "Ministers ought not only to preach a great deal more than formerly to servants, but also preach a great deal to white people about the instruction of servants, so as to convince the whole church and the servants that we are in earnest in this business and intend to persevere." Another says, "May I entreat you to be zealous, as you value the welfare of your country, the prosperity of our church, your own reputation as a minister of the gospel, and the approbation of our Lord and Saviour Jesus Christ. I am assured that nothing under God, will ever give motion to our Southern Zion in this most momentous of all causes of Christian benevolence before us, but the united, determined and protracted effort of God's ministers." Another says, "Under present circumstances it is evident[Pg 25] that they who engage in the delicate business of instructing our slaves, must confine themselves to the method of oral communication. But this limitation should not produce the slightest discouragement. Written documents bore but a small part in the early propagation of Christianity. Until the present age, indeed the mass of the people have received by far the greater part of their religious knowledge and impressions from the mouth of the living teacher. Even now perhaps the majority in our own country have their religious principles and character formed mainly by oral instruction. "Respecting the method best adapted to the negroes, experience must

decide. A few remarks will develop the general principles on which I would act if called to this high and holy duty. "1st. To study to make the instructions given both pleasant and profitable to the instructed. The whole carcass of modern technical theology—its metaphysics—its subtle distinctions—its mystical dogmas—its sectarian polemics—its technical phrases, &c. &c.—should be cast away by him who goes to this simple and ignorant people as a Christian teacher. He should know nothing among them but the plain facts, and practical precepts, and the devotional sentiments of the Bible; and these he should set forth in the most simple, intelligible, and animated language, abounding in illustrations drawn from objects familiar to his auditors. But let him avoid negroism and vulgarity of all sorts—they would detract from his respectability, and be offensive to the understanding, and native taste of the negroes themselves, who are ignorant indeed, and to a degree stupid—but they are not fools. "2d. To study maturely, and to digest in a lucid order, a systematic course of instruction—not the technical system of the schools—but a system of plain, practical truth, adapted to the peculiar state of the people to be instructed—illustrating, inculcating, repeating fundamental truths, and scriptural maxims, till they are well understood: aiming first to lay the foundation of a rational faith and an intelligent conviction—before the feelings and fancies of a blind enthusiasm are stirred up. It is peculiarly dangerous, to set fire to the combustible heap of crude and fanatical fancies that occupy the brain of an ignorant person, such as are most of the uninstructed negroes. It is no hard thing to guide a well instructed mind, in which reason and conscience have their due influence—but what can be done with a full blown enthusiast, or a furious fanatic, who is maddened by the chimeras of a diseased fancy? They will disdain sober instruction and set up for themselves. They will be your rivals, and have the advantage of you too, when once[Pg 26] the flame of blind enthusiasm is kindled in the congregation. "3d. To avoid cramming an unprepared mind with too much at once. A few ideas at one time should be clearly expressed and deeply impressed. Do not hurry matters; but let the weak stomach digest one bit, before another is administered; relieve the wearied attention, and quicken pure devotional feeling, by sweet hymns and simple fervent prayers, and short affectionate exhortations. "4th. To combine various modes of instruction; now a short sermon, methodically exhibiting a single point of truth or duty; now a suitable passage of scripture with a pithy commentary; now a catechetical exercise, either on the last sermon or by lecturing at the time, propounding a point clearly, and then examining the auditor to see if he remember and understand. This will quicken attention, fix what is understood, and detect what is wanting. To carry on this course, meet them twice on Sabbath and once in the week if possible. But do not claim too much of their Sunday leisure, or they will shun you. "5th. To gain their confidence and love, sympathize with their innocent feelings, talk to them privately, preserve a mild dignity without contemning their ignorance and degradation. Have all patience with them. "6th. Do nothing without the master's consent. Teach them what Paul directed slaves to do and be; but beware of pressing these duties too strongly and frequently, lest you beget the fatal suspicion that you are but executing a selfish scheme of the white man to make them better slaves, rather than to make them Christ's freemen. If they suspect this, you labour in vain." Another says, "On the modes of communicating a saving knowledge of Divine Truth to the coloured population, best suited to their genius, habits, and condition, we must remember that oral instruction is the kind of instruction alone that is universally allowed in slaveholding States. Hence the question with us will be, in what mode can oral instruction be best communicated? "I answer, 1st. Nothing can take the place of competent, qualified ministers or missionaries; men exclusively devoted to the work, who shall make it their lifetime labour and study, to whom adequate support must be given. The church is as much bound to furnish and support such missionaries, as missionaries to any other heathen people in the world. "2d. Their labours must be at churches or convenient stations on the Sabbath; and from plantation to plantation during the week. Plantation meetings are scarcely exceeded in utility[Pg 27] by Sabbath or any other kind of meetings, and therefore should be vigorously prosecuted. As a general rule none should attend but residents on the estates where they are held. "3d. In addition to the preaching of the gospel, classes of instruction should be formed, embracing in the first division, adults; and in the

second, children and youth. Special instruction should also be given to those who are members of the church, and those who are applying for admission. Let hasty admissions be avoided. "4th. The manner of communicating instruction should be plain and familiar; fully within their comprehension; without coarseness or levity; and with fervour. In the earlier stages of instruction, the catechetical method may be resorted to with success, your subjects being of the simplest kind; as you advance and your people acquire habits of attention and reflection and improve in knowledge, your subjects may be more elevated. "5th. The matter of preaching, at least for no very inconsiderable a time, may be chiefly, narratives, biographies, striking works of God, miracles, parables. Didactic discourses, at least at first, are far from being interesting to them. Vary the exercises of worship by singing, and sing standing. Let portions of scripture be committed to memory, as well as psalms, hymns and spiritual songs, to take the place of the foolish and irreverent ones that are often in use among them. The besetting sins of this people ought to be exposed continually. Here give line upon line, and precept upon precept, until conscience is enlightened. Give encouragement in preaching, address them as men, men whom you love, men whom you believe to be capable of improvement, and who, you make no doubt, will improve. "6th. Of the classes of instruction, I would say that they are of incalculable benefit. All that can be said in favour of Sabbath schools, and Bible classes, can be said in favour of these classes: properly conducted, they are nothing less or more, than Sabbath schools, and Bible classes for coloured persons. Our main hope of permanently improving this people lies just where it does with every other people: in the instruction of children and youth. Be beforehand with their parents, who can only, in the vast majority of cases, inculcate evil both by word and deed; and if it were practicable, an entire separation of children and adults (as is attempted by our missionaries at some of the stations by boarding schools and the like,) would be the best thing that could be done. Every effort therefore should be made to draw out and attach children and youth to the schools opened on the Sabbath, at stations, and to schools opened in plantations. Wherever these schools[Pg 28] are opened, if the missionary cannot be supported by good teachers, let him instruct the whole school, on the infant school plan himself. His instructions too should not be short, and imperfect, but embrace some regular system of Christian doctrine and practice; so that after a reasonable time, when the course is completed, a connected and intelligent view of Christianity will have been communicated. Connected with such a regular course of instruction, may be the use of scripture cards, and the like; teaching them to sing hymns, &c. Every thing I may say depends upon the teacher. If he is an interesting man, he will behold increased interest and rapid improvement in his classes. "With adult classes the improvement will generally be slower and the interest perhaps less and not so easily kept up. Let the same general course of instruction be pursued with them, for literally they are but grown up children. "7th. I must not omit to mention, that these efforts of regularly appointed missionaries, must be seconded by pastors of churches, and when they can, let them have in their own churches, coloured schools, under the superintendence of elders and laymen. Is it not wonderful that our churches have so long remained indifferent to this most interesting field of labour? One-half or two-thirds of our members have nothing to do. And why is it so? Because they will not labour for the coloured population. Let pastors awake and bring the subject strongly and repeatedly before their people. "8th. The Missionary must be supported by Christian owners; they must labour to improve the servants at home; having regular schools for the children and meetings for the instruction of adults. They should encourage their people to attend public worship, especially should they send the children to Sabbath school; otherwise such schools, let the missionary or teacher do what he may, will decline in all ordinary cases. "9th. Let owners also pay special attention to their plantation regulations; all these should be founded on Christian principle. Discipline, labour, houses, food, clothing, should all be attended to; lest in works we deny our profession. This is fundamental. "10th. While strict subordination is maintained on plantations, the general police of counties should be rigidly adhered to, and if possible the coloured population protected from ardent spirits. The plan now hinted at, or one very similar, will perhaps be found best suited to their genius, habits, and condition." But we must close. If our readers feel half the

interest in this subject, which its importance demands, they will thank us for these views, even if they should not concur in every suggestion made. Let every man stand in his lot, and put on the whole armour of God.

Category: 1848 works

Borrow the mountain's strength
As now its loneliness,
Hurl back this menace on itself,
Crush bronze with bronze—
Why, it would be as if some tall slim god,
Unburdened of his age-long apathy,
Took in his hand the thin horn of the moon
And set it to his lips
And blew sharp wild shrill notes
Such as our hearts, our lonely hearts,
Have yearned for in the dumb bleak silences.

III

Ah! Weak as wax against their bronze are we,
Ah! Faint as reed-pipes by the water's roar,
And driven as land-birds by the vast sea wind.

Page:War and Love.djvu/70

DUTCH PAINTERS AT HOME

Century Magazine by Emma Eames Chase
Volume 37, Issue 5 (March, 1889)

[This account was prepared a few years ago with the kind permission of the artists. - Editor]
A devotee of the modern school of Dutch art never paints to paint a "picture," but endeavors to portray some simple phase of nature or some quiet sentiment of every-day life. The work of the school is chiefly remarkable for its purity of color, its decided individuality, and its originality of conception. Their subjects, taken from the life around them, — the picturesque people, old cities, flat fields, winding canals, windmills, and clumsy boats, — must of necessity be simple and quaint. They combine the delicate perception of nature peculiar to the best French landscape painters with a sense of something higher and greater than purity of color and beauty of form — something that must come from the heart of man. In short, their work is first simple, then vigorous; as a consequence fresh, and always unacademic.

It was on a lovely morning at the Hague that we set out to call upon Mr. Josef Israels, the founder of the present school of Dutch figure-painters. There is a delightful little garden separating his studio from his house, and it was through this little Eden, flooded with sunshine, that we passed as we approached the studio door. He smilingly ushered us into the spacious, well-lighted, and handsomely furnished room. Being assured by our host that we were "as at home," we noticed the sketches here and there on the quiet gray wall with the high walnut wainscoting; the fine cabinets; the small but choice library of

French, English, and Dutch authors; the little book-case, which he laughingly tells us is his shrine where he keeps his own etchings; and the elegant portfolios characterized by that same simplicity which makes the rest of the furniture interesting. "The English people," he said, noticing that we were scrutinizing the appointments of the room with some interest — "the English people have paid for all these pretty things; in fact, England furnishes a market for all my work. I suppose you have heard how I struggled along in my painting for years until I happened to send a picture to England and had the pleasure of waking up one morning to find myself famous. In a short time after that picture was sold I had n't a picture left, not a sketch or a piece of scribbled paper; and from that time to this I have scarcely been able to paint enough to satisfy my patrons." "What a sudden success!" we involuntarily said. "And right alongside my recollection of success," added Mr. Israels, "is a most vivid picture of how I once painted a portrait for fifteen guilders and then left the town for fear the purchaser might become dissatisfied."

The picture of a mother standing outside the cottage door watching her baby with outstretched arms trying to toddle away without assistance is one he has been especially happy in painting. As he brought it out from the corner and set it before us he turned and remarked, "Now this is a true Israels." We feel in this, as in all his work, that charm and delicate sentiment, that pure simplicity, which reminds one strongly of Millet, though without imitation. A large picture upon an easel, representing some peasants returning home across the fields under a twilight sky, was treated with tenderness and truth. Then there were sketches of seashore life and fisherfolk that fully carried out the feeling of nature and simplicity manifested in everything he does.

In the studio of Mrs. Mesdag

In the Laan Van Meerdeervoort, near the Scheveningen Gate, is the house of Mr. H. W. Mesdag, the marine painter, and of his wife, a landscape painter of almost equal renown. We can hardly tell whether it was the artistic beauty of all the house within or the companionship of the enthusiastic master and his talented wife that made the anticipation of a visit there so delightful. As we pause a moment in the hall to lay aside our wrappings we cannot but notice the old carved bench, the tall clock, the long narrow mirrors in painted frames, and the rich hangings of tapestry lighted up by a rose window at the head of the stairs. Ascending to the studios we receive a friendly greeting from Mr. and Mrs. Mesdag.

The studios are two large rooms, overlooking the garden at the back of the house and connected by folding-doors the panels of which have been decorated by the artists' fellow-painters. Each room is lighted by a large sheet of plate glass, which furnishes a pure out-of-door light, and the harmonious and luxurious warmth of color surrounding us is a constant source of pleasure. A few choice pictures by various masters, ancient and modern, mirrors in quaint old frames, and beautiful tapestries, cover the walls. Two fine oaken cabinets are covered with models of every variety of Dutch craft, and others are filled with costly bric-à-brac. The Smyrna carpet, the carved chairs and tables, and the oddities of costume peculiar to the peasant people of the Old World, combine to make every corner and bit of wall a fine still-life, and yet form a broad and simple background for the numerous pictures on easels about the room.

Corner at Mesdag's

Adjoining the studios is a large well-lighted room arranged as library and picture gallery. The walls are hung with a collection of modern pictures, including many by Dutch painters, with excellent examples of other schools, particularly French landscape, to which Mr. and Mrs. Mesdag are partial. Finely carved cabinets are on each side of the room, and there are chairs of walnut, rich and dark with age, made comfortable by cushions of embroidered satin and velvet. In the center of the room stands a large

table covered with all the latest art journals, albums of photographs, and an unfinished aquarelle. Near one window is a portfolio filled with a collection of water-colors. Mr. Mesdag buys many water-color works, "because," he says, "I can keep such a large number of them. Just take them out of their frames, mount them on a simple cardboard, and stow them in a portfolio." The reader will understand the value of the remark when he is told that the studio and house, even to the attic, are filled with pictures — the accumulation of some fifteen years, for Mr. Mesdag is a great buyer. Laboring with all his energy to raise the standard of modern Dutch painting, he loses no opportunity to encourage a young painter whose work shows him to be working in the right direction, by buying and by encouraging others to buy whatever he produces that is meritorious. Quick to recognize all that is good and true in a picture, he is unsparing in his criticisms of what is false: feeling instantly any spark of originality or individuality, he is wholly unforgiving, or, worse, indifferent, when he sees a man in any way imitating another.

A bit of Dutch history

"I have some new pictures to show you," was his greeting as we looked into his studio one summer morning, and in spite of our protestations that he must not let us interrupt him, he laid aside his brushes and palette, adding, "It is not good to work too steadily; and, besides, a look at the gallery will refresh me." In the gallery we found, resting upon the seat of an arm-chair, two small panels. My companion exclaimed, "Corots!" and bent eagerly forward to drink in all the beauties of those subtile grays of sky, water, and foliage. Meanwhile Mr. Mesdag drew up one curtain and lowered another, then came back and stood quietly studying them with such thorough enjoyment beaming in his face that we scarcely knew which to enjoy the more, the Corots or his delight. A magnificent head by Munkacsy, the original study for the principal figure in his picture "The Last Day of the Condemned," was then set up in a good light, and, after that, a fine sunset by Daubigny.

"They are good and true," he said, "because the men who painted them devoted their lives to an endeavor to depict Nature as they saw her through their own eyes — not as some one before them had seen her, not after changing and reconstructing her to conform to specific academic rules, but fresh and ever variable as they found her; and then not by a little dabbling in paint, but by an earnest and persevering application of such knowledge as is recognized to be legitimate in good art, by a wholesome devotion to Nature, and by a determination to be original."

"But is there much opportunity left to be original now?" we say. "It seems as though everything had been done, and that all which follows must more or less resemble the work of some man or school that has gone before."

"My dear friends," said the master, laying his hands upon our shoulders, "it is as easy to be original to-day as it ever was; for that lies in the man, and not in the time in which he happens to live. To be original it is best to avoid academies, which have set rules for things that are subject to no rule; where you are set to copy the work of other hands and brains, instead of teaching you the use of your own; and where all votaries of this beautiful art are put through the same mill, regardless of genius or taste, and with no reference to what their subsequent aims may be. Go to work for yourself, with the criticism of a good master, if possible; and if you can succeed in reproducing on canvas the effect Nature produces upon you the result must be original, for Nature never looks at two people with precisely the same face."

"But," interrupted Mrs. Mesdag, "you are too severe on the academies. You must acknowledge that they are the best places for one to learn the necessary technicalities." For although Mr. Mesdag has been her only master, and she and her husband agree perfectly in their opinions of artists' work, they always disagree as to the best means of acquiring the rudiments of art.

"The study of still-life, the living model, nature in any form, is quite sufficient for all purposes," he said, "and you never need study from the antique to produce true art; for there is no such thing in nature, although academies give this subject more attention than perhaps any other." Then leading us back into the studio he laughingly remarked that the antique furnished material for many a good-natured discussion between his wife and himself.

In the studio we find his Salon picture for 1879 — a Dutch fishing-boat coming to anchor in the yellow, sandy surf of Scheveningen. The picture is full of light and motion, of the immensity and strength of the sea, and of the fierce March wind that is bringing the boat ashore. It illustrates perhaps better than we can describe the peculiar freshness of his work. "He has the genius of the Japanese for putting things where we least expect to find them; and yet, having found them, nothing seems more natural than that they should be so placed." So spoke one of his pupils.

In the studio of Maris

"At last I think I have what I was working for," he remarked, turning to another canvas whereon is painted a pale moonlight, strong, yet so full of sentiment that we find a great poem in it.

"He never gives up his original idea of a picture after it is once begun," said Mrs. Mesdag, "however fine an effect he may secure by accident. He is not satisfied if it be not the identical effect for which he was striving, and he will work a year or more upon one idea; but succeed he will. And when the picture has given him much trouble he at last contracts such an affection for it that nothing will induce him to part with it. It becomes more to him than it could ever be to any one else."

We learn that it is his custom to keep one or two pictures from each year's work, that he may watch his own progress and be on guard against retrogression.

As we look around on all the art treasures with which he has surrounded himself, and study the many pictures he has painted, we find it difficult to realize that this man who gives his time, his influence, and his wealth to raise and advance the standard of Dutch art, was employed in mercantile pursuits until his thirtieth year, and did not until then begin the study of his profession. When he did begin, however, it was with characteristic earnestness, giving up all other business and going to Brussels, there to study under his cousin Alma-Tadema and a landscape painter named Roeloffs.

He enjoys telling now of the surprise and amusement his first studies caused among his friends, and of how day after day he made studies of the street pavement before his window; and among his reminiscences not the least interesting is his narration of how he visited Ostend by mere chance, and there discovered that marine and not landscape was his forte. Once decided to devote himself particularly to the sea, he moved his home to the Hague and built his present house at the edge of the city, within easy walking distance of the sea.

Israels at work

That he continues earnest and constant in the study of nature the improvement in each year's work conclusively proves. Already his work ranks with the first in all Europe; and the admiration of France and England, as well as numerous medals and royal recognitions, serves to establish him in a most enviable position among contemporary painters.

Mrs. Mesdag is as earnest and enthusiastic in her work as is her husband. Her pictures show a vigorous, free handling, a fine perception of color, and a delicacy of feeling that place her among the first

landscape painters of Holland. She is fond of choosing her subjects from the low, flat turf-lands of Drenthe and the rolling sand-dunes, although she is equally successful in wood-scenes and in still-life. Her water-colors show a richness and purity of tone that is really beautiful, while Mr. Mesdag's are exceedingly delicate and gray in tone, appearing to be almost in black and white.

The name of Maris had become a very familiar sound to us through hearing frequent mention of the three gifted brothers who bear it, either one of whom would make it a name to be remembered in the world of art. The eldest, Matthew, a figure painter, lives a very retired life in London, caring for no companionship save his painting, which occupies him from dawn till dark and often far into the night. His works are peculiarly rich in color.

The work of William Maris, the youngest, who devotes himself to animal painting, is simple, vigorous, and true.

Of Mr. Jacob Maris the other painters always speak with peculiar respect, with a nod of the head that says more than words, expressive of their belief in a special genius which is not bestowed upon all men. We entered his presence with awe, but were quickly set at ease by his hearty, pleasant manners.

Bosboom's "Chapel"

I have scarcely anything to show you to-day," said he, looking about him, except this picture on the easel, which is about finished. The critics have been complaining that I always paint in a very low key, and I have done this to show them that they are mistaken."

The large canvas before us showed the sea and the beach lying under a brilliant sun-lit sky, with only a man and a cart at the water's edge to cast a shadow. In one corner of the room there was a sketch of one of his children that is charmingly simple and rich, and Rembrandtesque in effect. He was pleased that we had noticed and still remembered his pictures at the Paris Exposition, and he spoke of the eight years he prosecuted his study in that gay city. A peculiarity of this artist is that he rarely carries pencil or paper when he goes out for a day's observation, but you may meet him almost any day sauntering across the fields, along the canal, or over the dunes, with one of his little ones running along at his side. Then if you should happen to call on him a few hours later you would find him at work on a sketch of something seen that morning, in which he seems to catch more of the true feeling and sentiment of the scene than would be possible in a sketch made on the spot through two or three hours of changing effect, and in his finished pictures he succeeds in preserving the strength and freshness that so charm you in his sketch.

Thoroughly original and extremely clever, he makes us feel in his pictures something of the intensity with which he himself is impressed by nature. Said one of his brother painters, "Maris paints with a great deal of heart." We recall an aquarelle in Mesdag's collection that well illustrates how deep into reflection his pictures seem to lead, and exemplifies how intense are his conceptions of the subject. It represents an old fisherwoman sitting on the dunes in the twilight, with her back to the sea and the western sky, from which the light has nearly faded, leaving only a streak of deep yellow along the horizon. The tawny dunes are already full of the black shadows of night; the old hag, with her broad straw hat pushed back from her ugly face, glowers at you with eyes full of hate and anger. As we gaze, fascinated by its tragic weirdness, we do not wonder that it is called "The Night before the Murder." Mr. Maris is not partial to any class of subjects, and seems equally successful whether he chooses landscape, figure, or marine.

Perhaps one of the greatest charms of these Dutch studios is the marked individuality we find in each, and the perfect harmony of the surroundings with the tastes and works of the painter. Nowhere has this impressed us more vividly than in the beautiful studio of Mr. Johannes Bosboom, who is famous for his church-interiors.

In Bisschop's house

Passing through the small garden at the back of his house we enter a vestibule divided from the studio proper by a screen of dark walnut. At the right, and overlooking the garden, is an old-fashioned Dutch window with tiny square panes, before which are suspended frames filled with bits of old stained glass. Beside the window are an old oak table and an easy-chair, and in the opposite corner a stand of flowers is placed where the sunlight visits them every morning, keeping them bright and smiling. On one side is a small altar surmounted by a carved crucifix set between two candles. A lectern stands near, upon which a book of parchment lies open, disclosing curious illuminated letters in red, blue, and gold. Drawing aside the tapestry portière, we disclose a large room with pointed roof and naked beams, which gives one the impression of a chapel in use as a studio. This effect is heightened by the arrangement of light, which, falling clear and strong on the painter's work, leaves the rest of the apartment somewhat in shadow. The walls are wainscoted with black walnut to the height of about six feet, and above this they are white; the upper portion, however, is almost hidden beneath curious bits of carved wood, escutcheons of ancient heraldry, banners, and religious pictures. From the beams hang queer brass lamps and censers, while on all sides quaint candelabra hold waxen tapers. From carved brackets and the tops of oaken chests singular little wooden figures of angels, saints, popes, and bishops, that by some happy chance escaped the rage of the image-breakers long ago, now look calmly down on us. Carved chairs, desks, tables, and screens, with a thousand odds and ends, most of them relics, telling of the former glory of the Netherland churches, are collected here.

Mr. Bosboom possesses a very valuable collection of rare books, illuminated parchments, and official ancestral documents bearing great waxen seals. These occupy shelves at one end of the studio in the shadow of a fine old cabinet.

From this churchly studio come fine interiors of cathedral, chapel, or convent, in depicting the solemn majesty of which the pencil of Bosboom is unequalled. His work is noted for richness and quality of color, masterly management of architectural details, and simple and imposing grandeur of composition.

Some relics

His portfolio of aquarelles is filled with interesting studies of churches and other buildings in all parts of Holland. That he loves out-of-door life and sunshine, as well as gloomy aisles of ghostly edifices, we are assured in looking at his sketches of cottage and street scenes.

In the best modern collections in Europe his pictures are frequently found, and at the principal exhibitions of the world he has received high recognition and numerous medals. He is one of the oldest of the group of painters at the Hague, and with his wife, who is an authoress of talent and of wide reputation in her own country, is held in high esteem.

In a quaint old house on the opposite side of the city live Mr. and Mrs. C. Bisschop, both of whom are popular and clever painters. The place, like a little castle, is surrounded on the two approachable sides by moat-like canals. Crossing the smaller one by a drawbridge, we rang at a gate in the high brick wall, over which we read the legend, "Ons Genvegen" ("Our Delight"). A round-faced maid swings open the gate, and passing under the gnarled branches of an old mulberry tree we approach the house through

the garden. Under the vine-covered portico we enter and find ourselves half bewildered by our surroundings.

The parlors in which we are sitting have each a large south light, and the broad window-shelf is filled with bright flowers and plants. Through the small square panes of old stained glass we catch a glimpse of loaded barges slowly gliding along the canal.

In the studio of Bloomers

The white walls with wainscoting of oak are graced by old pictures, among them a Quentin Matsys and a Holbein; the unplastered ceiling shows the dark wood of the beams and the floor above. Old Delft tiles line the great fireplace, and the projecting chimneypiece of finely carved wood, from which hangs a beautifully embroidered valance, supports choice specimens of old blue ware. On the hearth below glitters a brazen stand of curious workmanship, on which dames of old were wont to brew their tea; while in a neighboring corner a graceful antique silver tea set bears testimony to the friendship of the late Queen of Holland, and is a reminder of her frequent visits.

Candelabra, rich in design and highly ornamental, with great reflectors of polished brass, and tiles suspended in narrow walnut frames, form other graceful decorations. Another piece of fine carving is an old pew, which, before the Reformation stripped the Netherland churches of such vanities, occupied a place in the cathedral at the Hague. Above it hangs a curious piece of tapestry illustrating the parable of the wise and the foolish virgins.

Mrs. Bisschop takes us into the dining-room, a lofty and spacious room, with quaint windows, corner cupboard, and massive furniture. The long narrow hall leading to the studios, with little oval windows, antique clock, tiles, pictures, shining candelabra, and flowers, is exceedingly picturesque. Even the kitchen is artistically arranged with tiles and old blue plates, glittering copper and brass utensils. A motto in old German text covers the projecting chimneypiece, above which hangs a fine still-life painting by Mr. Bisschop.

During the past twenty years the artist has taken great delight in collecting rare and beautiful objects for the furnishing of his house, until now it forms a perfect model of a Dutch manor-house of the seventeenth century, and many objects that elsewhere are simply bric-à-brac here acquire a new charm from their appropriate surroundings.

We reach Mr. Bisschop's studio by a winding-stair tucked away in one corner of the hall, with a tempting window half-way up that gives a glimpse of the sunny garden below. A large still-life on which he is at work is intended for his own dining-room, and represents a table decoration much used at old-time banquets. An enormous pasty, surmounted by a large stuffed swan decked out in jeweled necklace, gold crown, and other trinkets, is surrounded by great crystal goblets, and set up behind them is a brightly polished brass salver. The rendering of the different substances, the feathers, glass, and metal, is particularly fine. The vigorous original sketch for the portrait of the late Prince Henry, painted for the yacht club of Rotterdam, stands in one corner, and near it is the full-length portrait of a golden-haired American boy dressed as a page.

Mr. Bisschop's work always shows careful study and clever handling. While in composition and color it resembles more nearly the English school of to-day, the painter is in complete sympathy with those who are striving to advance the national art.

A new surprise awaited us in the studio of B. J. Bloomers, for we had not expected to find still another

so original in design.

Mr. Bloomers finds his pictures in the every-day life of the fisher and peasant folk of this part of Holland, and is particularly happy in depicting children and babies. No one ever succeeded better than he in rendering the erratic action and the bland, wondering expression peculiar to babies. His work, good in drawing and fine and true in color, is conscientious, and his subjects are full of the charm and poetry of child-life.

Mr. Bloomers's studio consists of two large apartments, and is at once interesting and practical. The first we enter is a lofty room lighted from the north by a large plate-glass window; the wall opposite is paneled with oak almost to the ceiling, and at one end of the room are tables, chests, and corner shelves filled with bric-à-brac. The opposite end is entirely open, and admits us into a low room that is a facsimile of a fisherman's cottage, with an open fire-place lined with tiles, a heap of fagots on the hearth, and the inevitable shining brass tea-kettle suspended on an iron crane. Old Dutch ware decorates the chimneypiece, and the wainscoting is of blue tiles, which, like all the furniture, were collected by the painter from peasant homes. Here Mr. Bloomers poses his models, using the other room simply as an atelier. An open door and a low window light the "cottage" from the north, but quite another effect may be obtained by closing these and opening a small high east window. Again, the entire feeling of the place may be changed by admitting the light from the south only. On that side there is a large window of old Flemish design, with diminutive panes, complicated oaken shutters, and finely wrought latches and hinges, which admits of great variety in the amount and direction of light. Various screens and a green baize curtain on a swinging bracket beside the studio window are so arranged as to prevent the light of one room interfering with that of the other. Our sketch was taken from the studio, just showing the dividing line between it and the cottage, with a view of the chimney and the east window.

A Dutch parlor

Another young man of talents is Gerke Henkes. He has chosen to portray the everyday life of the middle class in Holland, especially such incidents and customs as are peculiarly national. One of his subjects is a charming interior of that peculiarly Dutch institution, a teahouse. Three old ladies with their knitting are seated around a table on which the pretty tea-service and box of sweet-cakes are arranged, while beside one of the ladies the shining brass kettle is steaming away over a bucket of glowing turf. Through the open window behind them a glimpse is caught of the sunlit meadows.

A. Mauve, the landscape and animal painter, who died last spring, had talents and individuality. Painting in a simple, artistic manner, he sought the quiet tones of gray days on the fields and dunes of Holland. Approaching more nearly the French landscape-painters than those of any other school, with a fine perception of color and a quick sympathy for nature, he imparted his own healthy enthusiasm to all his work. Some of his best efforts were in water-color, with which he produced fine effects of atmosphere and distance.

Of the great number of painters residing at the Hague there are many besides those already mentioned whose work and reputation stand so high that we regret the necessity which allows only the mention of such names as Artz, Sadée, the brothers Albert and Joseph Neuhuys, and others.

In Henkes's studio

The Dutch school of water-color is fast becoming famous, and the annual exhibition at the Hague is perhaps unequaled. The painters all seem to be as expert in the use of water-color as of oil, employing it frequently in their sketches from nature.

The Painters' Club, of which they are all members, affords opportunities for social intercourse, amusement, and study. The club-house, formerly a chapel, is an ancient building situated on a quiet street at the end of a long court-yard. The janitor conducted us up the broad oaken stairway and admitted us into the spacious, well-lighted hall with high-arched wooden ceiling. The open fireplace, lined with ornamental tiles, and the great chimneypiece, carved and gilded, are the principal features of the room. Set in the mantel is a fine copy from Paul Veronese by Jacob Maris. The walls are hung with engravings, etchings, and with numerous sketches by the members. A bare oaken floor and oaken furniture, upholstered in dark olive stuff with embroidered dragons and curious figures, add to the somber and antique appearance of the room. On the long center-table are the principal art journals of the day and many finely illustrated works: a fine old cabinet contains still others, with portfolios of etchings by different masters. Two billiard-tables and a piano offer other amusement, and in one room is posed every evening a model in costume for those who may wish to make a study. Occasional exhibitions of these drawings and sketches take place, to which the public are invited. One of the most agreeable incidents in our intercourse with the painters of the Hague has been meeting them at one another's studios. The kindly interest one takes in the work and progress of another, the pleasant manner in which criticism is given and received, the frankness and openness manifested among them, the universal recognition given to the individual talent of each, show plainly an absence of that petty jealousy which too often mars the intercourse of such men.

Albany Hancock,

by George Simonds Boulger

Dictionary of National Biography, 1885-1900, Volume 24

HANCOCK, ALBANY (1806–1873), zoologist, was second son and third child of John Hancock, a saddler and ironmonger of Newcastle-on-Tyne, a man of exceptional cultivation, possessing a microscope and a small library containing works of Pliny, Linnæus, Lister, Donovan, and Bewick, and the 'Philosophical Transactions.' John Hancock had also made collections of plants, insects, and especially of shells, and though he died when Albany was six years old, so thoroughly did his widow carry on his teaching that, of their six children, four devoted themselves to the study of natural history. Of these Thomas studied geology, Mary devoted herself to drawing natural history objects, and John and Albany are best known as zoologists. There was some Huguenot blood, of Lorraine, and more remotely of Bohemian, origin, in the family. Albany was born at Bridge End, Newcastle, on Christmas eve, 1806, received a good education as times then went, and was articled to a solicitor in Newcastle when nineteen. Though the occupation was uncongenial, after serving his time he took an office over the shop of his friend, Joshua Alder [q. v.], to await practice on his own account in 1830. He had already in the previous year become one of the original members of the Natural History Society of Northumberland, Durham, and Newcastle, and communicated some notes to Alder's 'Catalogue of Land and Freshwater Shells,' published in 1830. He soon abandoned the law, and joined a manufacturing firm; but this proved no more to his taste. His associates were Thomas Bewick [q. v.], who died in 1828, William Robertson, an able botanist, his neighbour Alder, and Wingate, an ornithologist; and subsequently William Hutton, John Thornhill, and R. B. Bowman, all botanists, W. C. Hewitson and Dr. D. Embleton, zoologists, and Thomas Atthey and Richard Howse, palæontologists. A correspondence is extant, dating from 1832, with Dr. (afterwards Sir) W. J. Hooker, then professor at Glasgow, and Dr. Johnston, the marine zoologist of Berwick, with reference to a proposed quarto work on British birds, some of the plates for which Hancock's brother John had already executed. Though this work was never carried out, it bore fruit in the magnificent John Hancock collection of birds now in the Natural History Museum at Newcastle. Clever with his fingers from boyhood, Hancock from

1835 to 1840 devoted his time very largely to modelling in clay and plaster.

The first of the long list of his scientific papers, of which over seventy appear in the Royal Society's Catalogue, bears date 1836. These are short notes on birds in Jardine's 'Magazine of Zoology and Botany.' The great work of his life began in his association about 1842 with Alder in the study of the mollusca. The main result of this partnership was the 'Monograph of British Nudibranchiate Mollusca,' published by the Ray Society between 1845 and 1855. In this work many of the descriptions and most of the drawings for the eighty-three coloured plates, including all those that are anatomical, are the work of Hancock. The plates are remarkable alike for beauty of drawing and for delicacy of colour. The type specimens and original drawings are preserved in the Newcastle Museum. Having described many new species, Hancock in 1844 began, in conjunction with Dr. Embleton, lecturer on anatomy at the Newcastle School of Medicine, an exhaustive inquiry into the structure of *Alolis*, a genus of nudibranchs, with special reference to Quatrefages's theory of phlebenterism. This joint research extended to 1849, and was followed between 1850 and 1852 by a similar investigation of the genus *Doris*, the 'sea-lemon.' Meanwhile Hancock had taken an active part in promoting polytechnic exhibitions at Newcastle in 1840 and 1848, and in founding the Tyneside Naturalists' Field Club in 1846. To the 'Transactions' of this club he contributed a series of papers on the boring apparatus of sponges, mollusks, and barnacles. In 1857 he published in the 'Philosophical Transactions' one of his most valuable contributions to anatomy, 'The Organisation of Brachiopoda,' and in the following year he was awarded the royal medal of the society ; but he was too modest to become a candidate for fellowship, or even to accept the presidency of any of the local societies. In 1862 he became a fellow of the Linnean Society, and in 1868 there appeared in the journal of that society his paper 'On the Anatomy and Physiology of the Tunicata,' which was the preliminary to a proposed monograph of the British representatives of the group which he was never able to complete. In 1863, on the occasion of the meeting of the British Association, he, in conjunction with his brother John, got together a magnificent collection of scientific and artistic treasures in the Newcastle Central Exchange ; and for many years he was an active member of the Literary and Philosophical Society. Though fond of social intercourse, he allowed himself insufficient rest or exercise, and ruined his health. Unable for three years to work at his microscope, the gift of Lady Armstrong, with characteristic energy he turned his attention to the fossil fish and reptiles of the permian and carboniferous series, and produced, in conjunction with Thomas Atthey, and afterwards with Richard Howse, no less than fifteen papers upon them. Hancock died 24 Oct. 1873. He was not married.

[Trans. Northumberland Nat. Hist. Soc. 1875, v. 118, by Dr. D. Embleton, with a bibliography and a portrait from a photograph; Nature, 1874, ix. 43, by H. B. Brady; Annals and Mag. Nat. Hist. 4th ser. 1873, xii. 495, by J. E. Gray; Roy. Soc. Cat. Scient. Papers, iii. 156-8, vii. 900-1.]

VARIATION AND DISTRIBUTION.

from A monograph of the British nudibranchiate Mollusca

by Alder, Joshua, 1792-1867; Hancock, Albany, 1806-1873, joint author; Eliot, Charles, Sir, 1862-1931

Publication date 1845

https://archive.org/details/british_nudibranchiate_mollusca_pt8_lond/page/n4

The Nudibranchiata exhibit great variation within the limits of the recognized species, and it is probable that many of these should be reduced to the rank of varieties.

Even the land-slugs, though of sober hue, show that the soft integuments of the Mollusca are very susceptible of changes in colour. In the Nudibranchiata these changes are more conspicuous because whole divisions exhibit not only a greater range and brilliancy of coloration, but also an unusual fluidity and flexibility of outline. Many genera (especially in the Dorididae Phanerobranchiatae) are provided with appendages which seem to be less specialized for particular functions than are, for instance, the limbs of the Arthropoda. Their precise number or shape is immaterial to the animal. Thus *Polycera quadrilineata* has typically two unbranched dorsal appendages, one on either side of the branchiae, but occasionally these appendages are absent and frequently one is large and the other small. Sometimes they are bifid from the base upwards and appear to be four; sometimes they are palmate and bear five to eight small branches. Similarly the branchiae vary from five to nine, and the processes on the oral veil (considered to be typically four) from four to thirteen. The tubercles on the dorsal surface not only vary greatly in number but are sometimes separate and sometimes confluent, forming lines or ridges. These variations can hardly be regarded as monstrosities like a bifid tentacle or a double eye. They merely illustrate the tendency to vary when variation does not decrease efficiency. The function of the appendages in *Polycera* is probably to protect the branchiae by making it more difficult for external objects to touch them, and appendages of different shapes may perform this function equally well. Similarly the rhinophore sheaths of *Lomanotus genei* usually bear papillae, but these may vary not only in different specimens but even on the two sides of the same animal, to such an extent that I have seen the left rhinophore sheath with a smooth margin while the right bore five long processes. Other genera in which the external shape offers many modifications are *Bornella*, *MaHonina*, *Ceratosoma*, *Miamira*, and *Triopa*.

The appendages which have definite functions such as the rhinophores and branchia have naturally more definite and constant shapes, but the number is not constant either in the cerata of Solids or the branchial plumes of Dorids. These latter also show some variation in form. For instance, in *Staurodorina* and *Chrowodoru* they are typically pinnate but have a tendency to divide and become bipinnate.

Even the anatomical characters are sometimes variable, especially when there is a question of chitinous structures which may or may not be developed on soft organs. In

i See Elmhirst in *Annals of Scottish Natural History*, October, 1908, pp. 227—230, for statistics as to the variations of this species.

these cases there is often a doubt as to whether the divergent specimens are really identical, but it would seem that in *Doris* (especially in the sections *Staurodorina* and *Archidorina*) a slight labial armature may be present or absent, and specimens of *Acanthodorina* from New Zealand identified by Bergh with *A. pilosa* have no armature of hooks on the verge. With regard to the radula no general statement can be made. In some groups, e. g. the *Polyceridae*, it is remarkably constant, and it may be said that as a rule narrow radulae with differentiated teeth show less variation than those which are wide and contain many teeth of much the same pattern. The shape of the separate teeth and the general proportions of the arrangement are usually preserved within the same species, e.g. a short, broad radula does not become a long and narrow one. But the number and size of the teeth may vary greatly in individuals of different age and size, or sometimes without special reason. Thus in *Tritonia hombergii* the formula varies from

45 x 120.1.120 to 100 X 265.1.265. In iEolids the number of denticles on the teeth is often variable, particularly when the teeth are broad as in JBolidia.

Apart from other causes, age may affect not only the size but the shape of Nudibranchs. As a rule the older animals are larger, deeper in colour, and, if the species bears tubercles, pits, or processes, show these in a more developed form. But sometimes the opposite happens. The appendages do not keep pace with the general growth of the animal, and their shape becomes obscured. Thus in the young *Plocamoplierus* the dorsal appendages are relatively larger and more branched than in the adult. According to Trinchese the young *Lomanotus eisigii* is seolidiform in appearance, but the skin grows up between the cerata, which finally become a row of points on an undulating lateral membrane. In the young *Grosslandia* (allied to *Scyllsea*) the wings are bifid and bear finger-like processes. In the adult the bifurcation and the processes both disappear, and the wing becomes a roughly triangular flap.

But it is in colour that the variations of Nudibranchs are most striking. The common *Doris tuberculata* is protean in this respect. Pure yellow specimens are sometimes found, but usually there are mottlings of one or more tints on a light ground. The range of colours comprises red, yellow, pink, brown, and grey of many shades, purple, slatey blue, sage green, and perhaps others. In a series of specimens received from the Isle of Man slate-colour and greyish-blue predominate. At Plymouth red and yellow, though not universal, are very common. I have occasionally seen there bright yellow specimens marbled with bright red which might have competed with any tropical Dorid in brilliancy. It is worth noticing that this variation in colour and pattern, though luxuriant, is not unlimited. As far as I know, the markings of *D. tuberculata* never form stellate patterns on the back, as they do in the equally variable *D. testudinaria*, and there are never any spots on the under side of the mantle.

These variations are probably due in part to climate. At Plymouth many marine animals as well as seaweeds are reddish. Tropical Nudibranchs, as well as the Ascidians and sponges among which they live, are more deeply and gorgeously coloured than those of temperate and northern waters. These last are often of a semi-pellucid white, and when the coloration appears brilliant it will generally be found to consist of bright spots distributed over a colourless surface, and not of large pigmented areas. Colour also depends to some extent on food, especially among the JEolids. Though some of their markings may be due to pigment in the integuments, yet the predominant colour is generally determined by the hepatic diverticula as seen through the transparent cerata, and these vary with the food. Thus *Fiona marina* is of a greyish-blue when it feeds on *Verella*, but of a pale brown when it eats young barnacles. *Coryphælla gracilis* (orange-brown) and *O. smaragdina* (green) are probably similar variations produced in the same animal by different diets. So, too, in *Favorinus albus* the hepatic diverticula may be white, greyish-brown, coffee-coloured, red, or green, and white spots may be present or absent on the integuments. But though Trinchese noticed and figured all these variations at G-enoa, Vayssiere found that they did not exist at Marseilles.

The common *Molidia papillosa* is almost as variable in colour as *D. tuberculata*. Hecht mentions a case of its becoming violet after eating *Actinia equina*, and apart from such special and temporary modifications the species comprises several races, as described by Alder and Hancock, distinguished by their size and the length of the

cerata as well as by the colour, which ranges through many shades of grey, buff, yellow, brown, rose, and green. As in *D. tuberculata*, the specimens found on our southern coasts show a tendency towards a rosy or pinkish coloration. The colour of Dorids is to some extent affected by their food, though less than that of Solids. The brightly coloured species often frequent and feed on similarly bright sponges or Ascidians, and when they do not obtain their usual food in confinement they lose their colour. Hecht mentions that *Elysia viridis* (which usually feeds on *Codium*) became much larger when fed by him on *Cladophora*, and developed red cells in the epithelium.

This great variability naturally makes the definition of species a difficult business. In particular it is very hard to say whether preserved Nudibranchs which are similar but come from widely distant localities (such as Great Britain and the Falkland Islands) are specifically identical or not. Even when the characters of a living specimen are certain, their value as specific characters can be determined only after comparison with a series of other specimens. Hence species which are based on one (or even on two or three) specimens are nearly always open to suspicion, unless their peculiarities are so decided as to make them also representatives of separate genera. Alder and Hancock doubtless erred in creating too many species, particularly in the *Eolididae*, but the error is on the right side, for if certain types only are selected as species and others are dismissed as varieties, there is danger that the varieties will be neglected and the real multiplicity of forms forgotten. Yet morphologically a variety may be as important as a species. The only difference is that if two forms are connected by intermediate gradations they are called varieties, whereas if the connecting links are absent they are called species. Thus the forms described below as *Doris verrucosa* and *D. maculata* are as distinct as any accepted species. They can easily be distinguished in appearance, and present real structural differences. Yet it is highly probable that they pass into one another through the medium of *Doris pseudoverrucosa*, and also pass into many other forms which have received specific rank such as *B. javanica*, *O. uigeroi*, *O. atypica*, and *folklandica*. But it is clearly safer to maintain the two species as separate until it is proved that they pass into one another. And even then (provided our conception of species is

1 Thus the red British Dorids *Rostanga eoecinea* and *D. flammea* are not red sponges such as *Micociona atrisanguinea*.

not too rigid) there is no harm in retaining the specific names if the different varieties or races are found in different districts, as is often the case. But if eggs laid by similar parents in the same locality produce indifferently *B. verrucosa* and *B. maculata*, then the two forms must be registered as mere varieties. But though we are apt to overlook the luxuriant variability of the Nudibranchiata if we pay attention only to the series of forms selected as specific types, yet it must be admitted that, taking the classification as a whole, species have been unduly multiplied, and that of those registered at least a third are superfluous.

The question of variation and specific distinction is intimately connected with another, namely the distribution of Nudibranchs. It is unfortunately impossible to treat this interesting subject with the accuracy one would desire, because though the Nudibranch faunas of the north-eastern Atlantic and the western Mediterranean are well known, the available data for the tropical Atlantic are extremely scanty, and the specific identity of northern and southern forms is often uncertain.

The British coast-line extends over about thirteen degrees of latitude, and it is not surprising to find that two faunistic districts overlap within this considerable area. As Alder and Hancock have pointed out, the northern fauna is continued far south on our east coasts, whereas on the western side the northerly set of the currents and the influence of the Gulf Stream carries southern forms to the western coasts of Scotland and Ireland. Thus *Doris verrucosa*, which according to all other records is a definitely southern form, has been found, not only near Plymouth in England, but at Ballynakill and in the Firth of Clyde. The meaning of this phenomenon seems to be not so much that the northern fauna fails to reach our southern coast, as that on the western coast it is reinforced by a certain number of southern genera and species. But some northern forms, such as *Aldisa zetlandica*, *Cadlina repanda*, *Goryphella salmonacea*, have not been recorded from our southern coasts.

The fauna of Scandinavia is substantially the same as that of the northern parts of England and Scotland, and a considerable number of its species penetrate to the Arctic regions. The following forms and perhaps others have been taken within the Arctic Circle : —

Bendronotus, 3 species. *Boris tuberculata*.

Boto coronata. *Aldisa zetlandica*.

Pleuroleura walteri. *Cadlina repanda*.

Cratena or *Guthona*, 3 species. *Acanthodoris*, 2 species.

Goryphella, 7 species. *Adalaria proxima*.

Gumanotus lamceps. *Lamellidoris*, 2 species.

Favorinus albus. *Polycera*, 2 species.

Ghlamylla, 4 species. *Issa*, 2 species.

Hero formosa. *Triopa lacera*.

Elysia viridis. *Idalia pidchella*.

Limapontia nigra. *Ancula cristata*.

To these should doubtless be added other Nudibranchs which have been captured in northern but not strictly arctic waters, such as *Bathydoris* and *Boridoxa*. But the list, taken as it is, probably gives a fair idea of the arctic fauna. The only genera in it which are unknown in the temperate Atlantic are *Chlamys* and *Pleuroleuca*. 1 The Cladohepatica number twenty-four and the Holohepatica fifteen species. Among the former Solids (sixteen) are predominant: among the latter phauerobranchiate Dorids (twelve). The true cryptobranchiate Dorids are only three.

The fauna of the Atlantic coast of France appears to be practically the same as that of south England. All the Nudibranchs recorded by Hecht from Roscoff near Brest are described by Alder and Hancock. At Arcachon, too, the majority of Nudibranchs recorded are also known at Plymouth, but southern forms such as *Spurilia mediterranea* begin to make their appearance, and the commonest Dorid is *D. verrucosa*, which is rare with us. But it is not till we reach the coast of Portugal that the southern or subtropical element contributes a considerable proportion of names.

The Nudibranchs of this region, as described by M. d'Oliveira, comprise the following :

Doridopsis and *Tritonia*, 1.

Doriopsilla, *Marionia*, 1.

Boris, 2. *Facelina*, 4.

Jorunna, 1. *Goryphella*, 1.

Platydoris argo. *Amphorina*, 1.

Chromodoris, 3. *Eolidiella*, 1.

Goniodoris, 1. *Doto*, 1.

Polycera, 1. *Hermasa*, 1.

Triopa, 1. *Elysia*, 1.

Pleurophyllidia, 2.

In the above list the genera *Doridopsis*, *Doriopsilla*, *Chromodoris*, *Platydoris*, 4 and *Marionia* are characteristic of the warmer seas, and Portugal is probably their northern limit in the Atlantic.

The Nudibranchiata of the eastern coast of the United States and Canada — that is, of the north-west Atlantic — are not well known, though they have formed the subject of several publications. The lists which have been compiled are probably not exhaustive, and it is difficult to say how far the forms described are specifically the same as those found in the north-eastern Atlantic or merely similar to them. In any case the resemblance between the two faunas is close. The principal American genera are :

Goryphella, 9 sp. *Embletonia*, 2.

Eolidia papillosa. *Fiona*, 1.

Gratona (*Guthona*), 4. *Scintillea*, 1 or 2.

Galvina, 2. *Dendronottia**, 2 or 3.

Tergipes, 1. Doto, 2.

1 The distribution of this genus is very strange. All the other known species inhabit the tropical Indo-Pacific.

- Cuenot, Doridiens d'Areachon, 1901 ; id. Eolidieus d'Arcachon, 1906.

3 Opisthobranchs du Portugal, Coimbra, 1895.

4 N.B. — The designations *Platydoris testudinaria* and I*, plainly not correct.

1 Gould, Invertebrata of Massachusetts, and several catalogues l.v Verriil.

Pleurophylloides, 1 (probably *Lamellidoris bilamellata*, and about

P. uvulata). four other uncertain species.

Hermesia, 1. *Aclalaria*, 1.

Alderia, 1. *Issa*, 2.

Mytilaster, 1. *Palio*, 1.

Doris verrucosa. *Polycerella*, 1.

Geitodoris complanata. *Idalia*, 1.

Gadlina, 1. *Ancula*, 1 or 2.

Acanthodoris pilosa, and about *Heterodoris*, 1.

three other uncertain species. *Boridella*, 2 (probably = *Gorambe*).

Here as in the north-eastern Atlantic, the *Cladohepatica* (about thirty) are more numerous than the *Holohepatica* (about twenty), and among the latter the *Phanerobranchiata* are greatly in the majority. I have not found any record of the occurrence of *B. tuberculata*, but it is not likely that it is entirely absent. 1 All of the above genera are represented on this side with the exception of *Polycerella* and the little-known *Heterodoris* from deep water.

From various parts of the semi-tropical Atlantic, such as the Azores, the Sargasso Sea, Madeira, the coast of Morocco, and the Canaries, are recorded the following as well as some less certain forms : *Biscodoris*, 2.

Gratena and *Cuthona*, 2 sp. *Platydoris*, 1 or more.

Spurilla, 1. *Aldisa*, 1.

Fiona, 1. *Ghromodoris*, 1.

Glaucus, 2. Euplocamus, 1.

Beylaxa, 1. Plocamopherus, 1.

Phylliroe, 1. Boridopsis, 1.

Botilla, 1. Boriopsilla, 1.

Boris verrucosa. Phyllidiopsis, 1.

The above list is perhaps not very representative, as it is to some extent the result of pelagic collecting, and hence contains an undue proportion of forms which swim or live on floating seaweed. But even so, the Cladohepatica are no longer in the majority as in more northern latitudes.

The records from the Mediterranean are ample, but they refer almost entirely to Marseilles, Naples, and the Adriatic, so that we can say nothing about the fauna of the eastern and southern portions. The following is a rough analysis of the genera based chiefly on the works of Bergh, Trinchese, and Vayssiere. Some Mediterranean naturalists have shown a tendency to create superfluous species (e. g. in Boto and Marionia), and the numbers given here are only approximate :

Molidiella, Spurilla, etc., 5. *Capellinia, 2.

*Hervia and Liizzolia, 2. Amphorina, 2.

Galvina, 2 Corypliella, 5.

1 Mr. P. N. Bulch, of Boston, Mass., who has most kindly given me some information on this point, agrees that there is no certain record of the occurrence of this species on the Atlantic coast of the United States, but thinks that D. diademata, though wrongly described as phanerobranchiate, is really identical with it or at least nearly allied.

Favorinus, 2.

*Flabellina, 2.

Facelina, 10.

Forestia (= Galma), 1.

Other Solids, 5.

*Glaucus, 1.

Antiopella, 1.

*Madrella, 1.

-Etero, 1.

Pleurophyllidia, 2.

Tritonia, 5 mentioned.

*Marionia, 8 ,,

Boris, 3.

*Discodoris, 3.

*Platydorid, 2.

Aldisa berglii.

*Peltodoris, 1.

*Paradoris, 1.

*Baptodoris, 1.

Thordisa, 1.

Gadlina, 1.

Bostanga, 2.

Jorunna, 2.

*Chromodoris, 11.

*Borllopsis, 2.

*DoriopsUla, 1.

Fiona, 1.

Doto, about 10 described.

2'e%, 1.

Lomanotus, 2.

Hancochia, 2.

Scyllxa, 1.

*Phylliroe, 1.

Elysia, 2.

Hermsea, 2.

*Ercolania, 2.

Limapontia , 1.

Poly car a, 2.

*Greilada, 1.

Triopa, 1.

JEgires, 2.

Goniodorix, 2.

Idalia, 1.

*Ei(plocamus, 1 .

*Drepania, 2.

Lamellidoris qrmffe i.

The genera marked with an asterisk are not recorded from the British Coast.

The Mediterranean fauna is richer than that of the northern Atlantic, for nearly all groups are well represented. The northern genera JEolidia, Dendronotus, LamettidorisJ Acanthodoris, and Adalaria are not recorded, but new Cladohepatic forms, such as Flabel-lina and Tethys, make their appearance. Nearly all the northern genera of Crypto-branchiate Dorids remain, and are supplemented by Discodoris, Platydorid, said allied tonus. Probably the fauna is even more comprehensive than it seems, for while the presence of new species is certain, the absence of northern forms may prove to be incorrect .

A considerable number of species from Bermuda have received names, but the descriptions are slight and do not always accord with the genera to which the specimens are assigned. But it would appear that at this point (about 32° N.) the northern fauna is considerably modified by the addition of many brightly coloured Dorididffi and Elysiidse.

The fauna of the tropical Atlantic is known by small collections from the Cape Verde Islands (about 20° N.), the West Indies (mostly from between 1-" .V and 20 X. . and the province of Alagoas in Brazil (about 10° S.). On the African side no specus* from the equatorial Atlantic have been examined.

from *The meditations of Marcus Aurelius*
by Marcus Aurelius, Emperor of Rome, 121-180;
Collier, Jeremy, 1650-1726; Zimmern, Alice, 1855-1939

Publication date 1887

14. The inclination of the generality may be re-
duced to these heads : Some people are little enough
to be attracted by things in the state of bare exist-
ence or vegetation, as with stones, wood, figs, grapes,
olives, and such like. Others, Avho are somewhat

more reasonable in their fancy, must have life to charm them ; and these, it may be, are in love with their flocks and herds. A third sort, better furnished than the former, admire nothing beneath a rational soul, and this not as a whole, but as it were they pride themselves in slaves, possessed of some skill, parts, or industry. But he that values a rational creature that is social and universal runs into none of the follies above mentioned, but makes it his chief business to look to his own soul, and keep it in rational and social movements, and to assist all mankind in the public interest.

15. Some things are pressing into being, and others are hastening out of it, and that which was entire just now, is part of it spent already. The world is renewed by this change and flux, no less than the infinite series of ages by the perpetual succession of time. Now, who would set a value upon things hurried thus fast down the stream, on which it is impossible to stop ? Such a passion is much like falling in love with a sparrow flying over your head. You have, as it were, but one glimpse of her, and she is out of sight. Life is but a sort of exhalation of the blood, and a little breathing in of air. Now, to inhale and exhale your breath for the support of life, which you do every moment, and expire your last, when you lose the whole power of breathing which you received at your birth yesterday or the day before, is much the same action.

16. Neither the perspiration of plants, nor the breath of animals, nor the impressions of sensation, nor the puppet- motions of passions are privileges of any great value. To which we may add the instinct of crowdinsT into herds, too^ether with the functions of nutrition, this latter being not unlike a separating of our food. What then is it that you count worth your esteem ? Applause % Not at all. Why, then, you must not value the applause of tongues, for the commendation of the multitude is nothing else. Well, I find fame and glory will not tempt you ; what, then, is there behind worth the having % To govern your motions, and make use of your being according to the intentions of nature. This is the design of arts and improvement in other cases, every artificer and profession endeavouring to make the thing tit to answer the end for which it was intended. This, for instance, is the design of vine-dressers and those that

manage horses and dogs. And learning and education have all one object in view. It is agreed then, the main point lies here. Compass but this, and let all things else alone. Must your inclinations always run riot, and will you never become free, self-contained, and passionless ? This temper will let loose abundance of uneasy passions upon you. It will make you grow envious, full of jealousy and suspicion, and apt to overreach those who are possessed of something you have a mind to. And when strong desires are unsatisfied, you will find yourself mightily disturbed. And this will make you murmur and grow mutinous against the gods. But if you come once to pay a due regard and reverence to your own reason, you will be pleased with yourself, serviceable to society, and compliant with the gods. That is, you will be entirely satisfied with their rule and administration.

17. The elements either press upwards, or fall downwards, or else run round in a circle. But virtue has none of these motions ; she is of a nobler kind. Her progress in regular thoughts is somewhat unintelligible, but always prosperous.

18. What a strange humour there is amongst some people. They do not care to afford a good word to their contemporaries, and yet are very desirous of being praised by posterity, that is, by those they never saw, nor ever will have the least acquaintance with. Now this is almost as absurd as it would be to be disturbed because you were not commended by the generations that lived before you.

19. Because you find a thing very difficult, do not at once conclude that no man can master it. But whatever you observe proper and practicable by another, believe likewise within your own power.

20. If an antagonist in the circus tears our flesh with his nails, or tilts against us with his head, and wounds us, we do not cry out foul play, nor are we offended at the rough usage, nor suspect him afterwards as a dangerous person in conversation. It is true, when we are at the exercise we guard and parry, but all this is done without raising ill blood, or looking upon the man as an enemy. Let us act in this way in the other instances of life. When we receive a blow, let us disregard it, thinking we are but at a trial of skill, for, as I said before, it is in our power

to retire without feeling malice and ill-will.

21. If any one can convince me of an error, I shall be very glad to change my opinion, for truth is my business, and nobody was ever yet hurt by it. No ; he that continues in ignorance and mistake, it is he that receives the mischief.

22. I do my duty, that is enough. As for other things, I shall never be disturbed about them. For they are either without life or without reason, or they have lost their way and cannot find it.

23. As for brute animals, and things undignified with reason, use them generously and nobly, as beings that have reason should treat those that have none. But treat men, since they have reason, as members of the same society. And in all your affairs invoke the gods for their assistance. As for the time you are to continue this, never trouble yourself whether it is long or short. For three hours of life thus well spent are sufficient.

24. Alexander the Great and his groom, when dead, were both upon the same level, and ran the same chance of being scattered into atoms or absorbed in the soul of the universe.

25. What abundance of motions there are in the body, what abundance of thoughts in the mind at the same time ! He that considers this will not wonder so much that infinitely more productions, nay rather, all that are, should exist together in that great whole we call the universe.

26. Suppose you were asked to spell Antoninus's name, would you sound every letter with emphasis in the company's ears ? Or would you return their passion if they were angry ? I conceive you would rather go mildly to work, and give them the letters and syllables as they stand, without noise. Apply this to greater instances, and remember that all duties in morality have a determinate number of parts to render them complete. These must be observed, and performed in order; but it must be done smoothly, without giving provocation upon meeting with provocation.

27. You hold it cruel to balk people's fancies,

and not give them leave to pursue what they reckon their interest. Yet with this you are chargeable in some measure yourself when you are angry with those that do amiss ; for they are carried towards what they esteem their own interest and convenience. But that you will say is their mistake. Then it is your part to lead them out of it, and to show them their error without resentment.

28. What is death ? It is a resting from the vibrations of sensation, and the swayings of desire, a stop upon the rambling of thought, and a release from the drudgery about your body.

29. It would be a shame if your mind should falter and give in before your body.

30. Have a care you have not too much of a Caesar in you, and that you are not dyed with that dye. This is easily learned, therefore guard against the infection. Be candid, virtuous, sincere, and modestly grave. Let justice and piety have their share in your character; let your temper be remarkable for mildness and affection, and be always enterprising and vigorous in your business. And, in short, strive to be just such a man as virtue and philosophy meant j^ou to be. Worship the gods and protect mankind. This life is short, and all the advantage you can get by it is a pious disposition and unselfish acts. Do everything as a disciple of Antoninus ; imitate him in the vigour and constancy of his good conduct, in the equality, sweetness, and piety of his temper, the serenity of his aspect, his contempt of fame, and the generous ambition he had to be perfectly master of his business. Further, it was his way to dismiss nothing till he had looked through it, and viewed it on all sides ; to bear unreasonable remonstrances without making a return ; never to be in a hurry ; to be backward in giving encouragement to informers. He was a great judge of men and manners, but of no reprimanding humour ; not at all apt to be frightened ; not too suspicious, nor like a sophist. Satisfied with a little, as one might easily perceive by his palace, his furniture, his habit, his eating, and his attendance. His disposition was patient, and fatigueing his delight. He was temperate in his diet. He was firm in his friendship, and steady and agreeable in the manner of showing it. He gave his courtiers all the freedom imaginable to contradict him, and was pleased

with the proposal of a better expedient than his own. To conclude, he was a religious prince, but without superstition. Pray imitate these good qualities of his, that you may have the satisfaction of them at your last hour as he had.

81. Rouse and recollect yourself, and you will perceive your trouble lay only in a scene of imagination. And when you are well awake, look upon these realities as you did upon those visions.

82. My person consists of soul and a little body. To this latter all things are morally indifferent, the body being in no condition to make a distinction of this kind. And as to my mind, there is nothing can affect her, her OAvn actions excepted ; now these are all within her power, and of all her actions she is only concerned with the present, for what is past or to come, signifies as much as nothing, and is at present indifferent.

83. As long as the hands and feet do the work they were made for, they move naturally, and with ease. Thus while a man performs the functions of a man, and keeps true to his condition, he feels no more weight than what nature lays upon him. Now that which is not beside the intentions of nature can never be a real misfortune.

84. What abundance of sensual satisfaction have thieves, parricides, and usurpers been possessed of?

35. Do not you observe among your artificers, though they bear the contradiction and impertinence of the unskilful, yet they will not comjDly so far as to be talked out of their knowledge, or work against the rules of their trade ? And is it not a scandalous business, that an architect or a physician should have more regard for his profession than a man has for his ? For his, I say, in which he has the honour of the gods for his partners.

36. The vast continents of Europe and Asia are but corners of the creation. The ocean is but a drop, and Mount Athos but a grain in respect of the universe, and the present time but a point to the extent of eternity. These things have all of them petty, changeable, and transitory beings. Remember likewise that all things proceed from the soul of the

universe, either by direct or indirect causality. Thus the growling deformity of a lion, the poison of serpents, and whatever seems offensive in nature, as thorns or dirt, are the outcome of something noble and beautiful. Do not therefore suppose them insignificant and unworthy the being you worship, but consider the fountain whence all things spring.

37. He that has taken a view of the present age, has seen as much as if he had begun with the world, and gone to the end of it ; for all things are of one kind and of one form.

38. The mutual dependence all things have, and the relation they stand in to each other, is worth your frequent observation. For all the parts of matter are in some measure linked together and interwoven, and for this reason have a natural sympathy for each other. For one thing comes in order after another, and this comes about through their active movement and harmony, and the unity of their substance.

39. Bring your will to your fate, and suit your mind to your circumstances, and love those people heartily that it is your fortune to be engaged with.

40. Those tools, vessels, and utensils are said to be right, which serve for the uses they were made, though in this case the artificer that made them is commonly absent. But in the works of nature, the forming power is always present with the effect, and abides there, wherefore this deserves a particular regard. From hence you are to conclude that as long as you behave yourself as this sovereign power directs you, you will live in accordance with intelligence. In this way too all things in the universe are directed by intelligence.

41. If you suppose anything which lies out of your command to be good or evil, your missing the one or falling into the other will unavoidably make you a malcontent against the gods, and cause you to hate those people whom you either know or suspect to be instrumental in your misfortune. To be plain, our being concerned for these objects often makes us very unreasonable and unjust. But if we confine the notion of good and evil to things in our power, then all the motives to complaint will drop off; then we shall neither remonstrate against Heaven, nor quarrel

with any mortal living.

42. All people work in some measure towards the ends of Providence, some with knowledge and design, though others are not sensible of it. And thus, as I remember, Heraclitus observes, that those who are asleep may be said to help the world forward. In short, the grand design is carried on by different hands and different means. For even he that complaining makes head against his fate, and strives to pull the administration in pieces, even such a testy mortal as this contributes his share abundantly, for the universe had need even of such an one. Consider, then, how you are ranging yourself, and what workers you are joining. For He that governs the world will certainly make you good for something, and prove serviceable to his scheme, one way or other. Have a care you do not make such a ridiculous figure in nature, as that mean and ridiculous verse did in the play Chrysippus mentions.

THE WOMEN'S COLLEGES

from *The renaissance of girls' education in England; a record of fifty years' progress*
by Alice Zimmern, 1855-1939

THE chief gain that this half-century has brought to women's education is their admission to the universities. It is the key-stone of the arch, without which the rest of the fabric could have neither stability nor permanence. The schools look to them for their teachers and their standard, and gain thereby an element of fixity hitherto lacking. If boys' education may be blamed for excessive conservatism, that of girls has suffered from extreme mobility. Since girls' schools led nowhere, and acknowledged no outside guidance, their aim was perpetually changing, according to the ever-varying dictates of sentiment or expediency. Independent and unorganised, they lacked all connection with past and future ; and it is this that the universities are now giving them.

Apart from its intrinsic importance, this reform is remarkable for the speed and completeness with which it has been accomplished. Thirty years ago it had hardly been seriously contemplated; now eight of

the ten universities of Great Britain teach their students without distinction of sex, while two others admit them to lectures, examinations, and many other privileges. All this has not been brought about without hard work and persevering effort ; and it would be vain to seek the origin of all the separate forces that, acting and re-acting on one another, have produced this result. Many were the workers, and the honours of the pioneers must be shared, but among those who led the way a chief place belongs to Miss Emily Davies. From the first she realised that the reform in girls' education must begin at the top. To quote her own words: 'The incompleteness of the education of schoolmistresses and governesses is a drawback which no amount of intelligence and goodwill can enable them entirely to overcome. It is obvious that for those who have to impart knowledge the primary requisite is to possess it ; and it is one of the great difficulties of female teachers that they are called upon to instruct others while being inadequately instructed themselves. The more earnest and conscientious devote their leisure hours to continued study, and no doubt much may be done in this way ; but it is at the cost of overwork, often involving the sacrifice of health, to say nothing of the disadvantages of working alone, without a teacher, often without good books, and without the wholesome stimulus of companionship/ 1

But, important as was the improvement in the education of the teachers, Miss Davies had a wider aim in view for the college she meant to found. It was to bring a really liberal education within reach of all women, apart from any special professional aim. Girls, as well as boys, should have opportunities given them to carry on their studies in congenial and stimulating surroundings, unhampered by the cares of earning and unhindered by conflicting

1 Emily Davies, Higher Education of Women.

duties. To them, too, the college life was to bring that joyous spring-time of youth, friendship, and unfettered delight of study and leisure which had hitherto been withheld from them. Such was the generous purpose in the minds of a few men and women who were trying to fire others with their own enthusiasm.

Even at the time of the Schools' Inquiry Com-

mission this question had been mooted, and a memorial had been sent up pointing out the want of a system of 'instruction and discipline adapted to advanced students, combined with examinations testing and attesting the value of the education received.' The report of the Commission and the discussion it aroused helped to give publicity to the proposal, and at last it was resolved to test the feasibility of the scheme by actual experiment. In 1867 a committee had been formed to consider the possibility of founding a college 'designed to hold in relation to girls' schools and home teaching a position analogous to that occupied by the universities towards the public schools for boys.' It was resolved to try an experiment on a small scale, and proceed further as funds became available. At Hitchin, near Cambridge, a small house was hired for the six students who presented themselves, and in October 1869 they began the work prescribed to candidates for degrees by the University of Cambridge. Insignificant as these beginnings may seem, they were of momentous importance in the history of women's education. The founders of this, the first women's college in England, had to choose once for all between a women's university, with its exclusive studies and degrees, and admission to the great universities of the country. The question of a women's university debated and vetoed in 1897 had really been finally settled in 1870, when the first lady students requested and received permission to be examined in the papers set for the Previous Examination.

The prospectus of the new college issued in the autumn of 1869 contained this clause : 'The Council shall use such efforts as from time to time they may think most expedient and effectual to obtain for the students of the College admission to the examinations for the degrees of the University of Cambridge, and generally to place the College in connection with the University. 3 This ambitious programme thus early laid down for the infant College must have provoked many smiles ; and looking back now after the lapse of nearly thirty years, we hardly know whether to wonder most at the confidence placed by the founders in the hitherto untried abilities of girls or at the success which so abundantly justified their anticipations.

It was thus made clear from the outset that the

new college was to be no self-centred institution, but was to derive its teaching, inspiration, and standard from Cambridge, provided always that the University were willing to accept the new responsibilities thus proposed. For this end it seemed desirable to make an informal experiment, and through the kindness of the individual examiners five of the students were submitted to the test of the Previous Examination. All were successful; four attained the standard required for a First Class, and one that of a Second. Two years later three students entered for Tripos Examinations in the same informal manner, two passing in classics and one in mathematics. Thus three years after the opening of the College three of its students had fulfilled all the conditions required by the University of Cambridge for a degree in Honours. That was a sufficient answer to the doubters; the founders had justified their action. Henceforth the future of the College was fixed.

Meanwhile vigorous efforts were being made to raise money for the permanent building to be erected in or near Cambridge. This was no easy task. Generous donations for the needs of women were at that time unknown. The Quarterly Review recommended 'simplicity of living and the strictest "economy" as alone suitable for women who might have to earn their own living, and desired to combine with this 'training in housekeeping, regular needlework . . . such cultivation as will make a really good wife, sister, and daughter to educated men/ Against such selfish and confused notions it was difficult to contend. As Miss Shirreff wrote at the time : ' Never yet have a company of women been able to scrape together funds for an object specially their own, be it club, or reading-room, or hospital, or, as now, a college.' It is pleasant to realise that this is no longer true, and that the writer of these despairing words lived to see the change she had helped to bring about.

The money came in, though slowly. Madame Bodichon generously gave the first thousand pounds, and among the earliest subscribers was George Eliot. Lady Stanley was another who gave liberal aid. The subscription list gradually grew longer ; a piece of land was secured at Girton, near Cambridge, and building began. In 1873 it was ready for occupation, and henceforth became the home of the Ladies' College, now incorporated as Girton College, with Miss

Davies installed as Mistress. As the numbers increased, fresh additions were made to the building, but the aim and work of the College remained unchanged. Students were prepared for the Ordinary and Honours Degree Examinations by means of lectures given at Girton, and, as these were gradually opened to women, by attendance at some of the professorial and intercollegiate lectures in Cambridge. They were informally examined with the same papers as were set to the men, and in every detail of preliminary test, length of residence, etc. they conformed to the rules laid down by the University for its members. In lieu of the degree, which could not be conferred upon them, they received from the College a 'degree certificate,' and year by year fresh proofs were given of the general efficiency of the College and its students. In this way informal connection with the University was combined with formal adherence to its regulations. Thus matters continued till 1881.

Side by side with the beginnings of Girton, another movement had been at work. This was largely due to the North of England Council, which by promoting examinations for women over eighteen, had been establishing a fresh link between the University of Cambridge and the education of girls. A Cambridge committee established courses of lectures in all the subjects of examination. These naturally attracted many students from a distance, and the same persons who had organised the lectures, soon had to face the problem of housing the audience. Mr. Henry Sidgwick, to whose generous and unfailing assistance women owe so much, invited Miss Clough to come and take charge of a house of residence for women students. This house No. 64 Regent Street became the germ of Newnham. As the numbers increased, removal to larger premises became necessary, and Merton Hall was taken. When this too had to be abandoned it was resolved to build. Funds were raised by the Newnham Hall Company, and eventually this was amalgamated with the association which had charge of the lectures, and the two were incorporated as Newnham College. This development from small beginnings, under the Principal's able management with the constant help and sympathy of Mr. and Mrs. Sidgwick, has now been fully made known through Miss A. B. Clough's interesting biography of her aunt. Newnham has seen some changes of policy and

programme since its first beginnings in 1870, but its true aim, to advance the education of women at Cambridge, has always remained the same.

Since Newnham originated in a house of residence for girls preparing for the Higher Local Examination, this was naturally the goal set before the first students ; but very early in its history some few who were more ambitious or better prepared, found this aim insufficient, and began, like the Girton students, to study for the degree examinations. The Higher Local, at first the goal, gradually receded in importance, and became a preliminary instead of a final, but it was not made compulsory to follow the Cambridge curriculum exactly, and in those early days great latitude in choice of subjects, examinations, length of residence, etc. was allowed to Newnham students.

Thus matters continued till 1880, when special attention was called to Girton by the distinguished success of one of its students, who was declared by the examiners in the mathematical Tripos to be equal to the eighth wrangler. There was now a ten years' record of good work to show, and the time seemed opportune for bringing about a more formal connection with the University. A memorial was drawn up and presented, which called attention to the ' repeated instances of success on the part of students of Girton and Newnham Colleges, in satisfying the examiners in various degree examinations at Cambridge/ and praying the Senate to 'grant to properly qualified women the right of admission to the examinations for University degrees, and to the degrees conferred according to the result of such examinations/ This was signed by 8500 persons ; other petitions to the same effect were received, and as a result a syndicate was appointed to consider the matter. Their report advocated the formal admission of women to the Honours examinations of the University, and the publication of a separate class-list, indicating the position of each in the general list. They did not, however, recommend conferring degrees on women, nor did they advise admitting them to the Ordinary Degree examinations. The recommendations were embodied in three Graces, passed by the Senate on February 24, 1881, a red-letter day in the annals of College women. These are the most important :

' 1. That female students who have fulfilled the conditions respecting length of residence and standing which members of the University are required to fulfil, be admitted to the Previous Examination and the Tripos Examinations.

' 2. That such residence shall be kept (a) at Girton College;; or (6) at Newnham College; or (c) within the precincts of the University, under the regulations of one or other of these Colleges ; or (d) in any similar institution within the precincts of the University which may be recognised hereafter by grace of the Senate.

' 3. That certificates of residence shall be given by the authorities of Girton College or Newnham College or other similar institution hereafter recognised by the University, in the same form as that which is customary in the case of members of the University.

'4. That except as is provided in regulation 5, female students shall, before admission to a Tripos Examination, have passed the Previous Examination (including the Additional subjects), or one of the examinations which excuse members of the University from the Previous Examination.

'5. That female students who have obtained an Honour certificate in the Higher Local Examination, may be admitted to a Tripos Examination, though such certificate does not cover the special portions of the Higher Local Examination, which are accepted by the University in lieu of parts or the whole of the Previous Examination ; provided that such students have passed in Group B, (Language): and Group C, (Mathematics).

' 6. That no female student shall be admitted to any part of any of the examinations of the University who is not recommended for admission by the authorities of the College, or other institution, under whose regulations she has resided.

' 7. That after each examination a class-list of the female students who have satisfied the examiners shall be published by the examiners at the same time with the class-list of members of the University, the standard for each class, and the method of arrangement in each class being the same in the two class-lists.

' 8. That in each class of female students in which the names are arranged in order of merit, the place which each of such students would have occupied in the corresponding class of members of the University shall be indicated.

' 9. That the examiners for the Tripos shall be at liberty to state, if the case be so, that a female student who has failed to satisfy them, has in their opinion reached a standard equivalent to that required from members of the University for the ordinary B.A. degree.

' 10. That to each female student who has satisfied the examiners in a Tripos Examination, a certificate shall be given by the University stating the conditions under which she was admitted to the examinations of the University, the examinations in which she has satisfied the examiners, and the class and place in the class to which she has attained in each of such examinations/

This was followed in 1882 by permission to pass the examinations for degrees in Music.

The Colleges and their students thus received formal acknowledgment from the University, and the status then conferred remains unchanged to this day. Two attempts have since been made to induce the University to carry its concessions to their logical issue, and confer degrees on women. That of 1887 came to an untimely end, as it was not even considered by a syndicate ; the events of 1897 belong to recent history, and are too fresh to allow a proper estimate of their significance. The facts are these. In 1896 four memorials were presented- to the Council, asking for the nomination of a syndicate * to consider on what conditions and with what restrictions, if any, women should be admitted to degrees in the University/ The syndicate was appointed, and reported in favour of conferring 'the title of the degree of Bachelor of Arts ' by diploma upon women, ' who, in accordance with the now existing ordinances, shall hereafter satisfy the examiners in a final Tripos Examination, and shall have kept by residence nine terms at least; provided that the title so conferred shall not involve membership of the University/ This seemed a very moderate proposal, since it only

involved a formal acknowledgment of privileges already conferred, but somehow the University took fright. Perhaps it now for the first time realised what had already been done, and determined to allow no more concessions ; perhaps an element of jealousy was beginning to play a part among the younger members who had appeared in the same class-lists as the women, and not always in the highest places; certain it is that while the best weight and learning in Cambridge were in favour of the proposals, numbers were ranged on the other side; and the voting resulted in a majority of more than a thousand against the proposal. In estimating this result it is well to remember that the women's colleges had met with far more rapid success than even their founders had anticipated. They had produced a Senior Wrangler and a Senior Classic, and a formidable list of first classes in these and other Triposes. It was no longer possible to put aside their achievements with the old contemptuous formula, ' very good considering/ The movement had succeeded beyond all hope or fear, and while its true friends remained staunch, many of the indifferent now ranged themselves among the open enemies. Events had moved too fast for the rearguard of public opinion to keep up with them. At any rate the refusal was decisive, and matters settled down once more to the status quo of 1881.

Anomalous as is their position, the students of Girton and Newnham have many and great advantages. For a comparatively low fee they receive all the advantages of a University education ; they enjoy the manifold privileges that belong to residence in Cambridge, they may attend nearly all professorial and very many college lectures, their own colleges also provide excellent lecturing and coaching; and they may enter for any of the Tripos Examinations, and for those that lead to the degrees of Doc. and Bac. Mus. They have the advantage of life in beautiful buildings, with plentiful opportunities for recreation, exercise, and social intercourse, while the very fact of belonging to Girton or Newnham confers a certain prestige which is an advantage professionally and socially. However much we may desire the degree, and regret its indefinite postponement, it may yet safely be said that nowhere else can women obtain such advantages as at Cambridge. No anxiety need be felt about the future of the colleges. The success of their students, the influence their ' graduates ' have

had on the teaching profession, and the good work done by them in other fields, have amply justified the new departure. If success has come too quickly, public opinion may lag behind a few years longer. Meantime the work goes on.

At this period of their history it is no longer necessary to describe the colleges. Everybody who knows Cambridge is familiar with them. Both have increased greatly since their first beginnings. Girton has added fresh wings and a tower; changed its entrance and built a library which is full to overflowing. The trees have grown up around it and offer pleasant shade to summer tea-parties and afternoon loungers, the 'woodland walk' that encircles the grounds is gay at almost all seasons with pretty blossoms and flowering shrubs. Newnham has enlarged its first (Old) hall and built two new ones, called by names that will ever be held in honour, Clough and Sidgwick Halls. One library has been outgrown, and another a generous gift has been lately added ; a road has been diverted allowing an addition to the grounds, and a fresh approach made under a tower gateway with beautiful iron gates presented by old students in memory of their first Principal. Girton has once more outgrown its accommodation, and is appealing for building funds. The colleges are growing both outwardly and in their aims. Not the least hopeful feature is the number of 'graduate' students who continue their studies in Cambridge or at one of the foreign universities, or devote to research or social problems that leisure and freedom from responsibility which women possess in a greater share than men. The founders have been abundantly justified in their resolve to establish no mere training-school for governesses, but to offer a wide and liberal education to all.

There are some differences in the arrangements of the two colleges. At Girton each student has two rooms, at Newnham one. The Girton fees are 105 per annum including coaching and examinations ; at Newnham they are 75, but these items are not in all cases included. Girton supplies cabs for students who attend lectures in Cambridge ; Newnham, being in the town, is within a walk. Both require every one who has not taken an equivalent, e.g. the higher certificate of the Joint Board, to pass an entrance examination. Both colleges award scholarships,

though scarcely sufficient to meet the many demands from girls whose parents cannot afford the payment of full fees. Miss Welsh, one of the early Hitchin students, is now mistress of Girton ; Newnham has a Vice-principal for each of the halls, and a Principal over the whole. In this post Mrs. H. Sidgwick succeeded Miss Clough, when the true foundress of Newnham died in 1892.

There is a good deal of resemblance between the Cambridge colleges and the Oxford halls, though these latter have a different history. As early as 1865 a scheme for lectures and classes at Oxford had been organised by Miss Smith, and remained in operation for several years. In 1873 another similar scheme was set on foot by a committee of ladies, with Mrs. Max Miller as treasurer, and Mrs. H. Ward and Mrs. Creighton, followed by Mrs. T. H. Green, as secretaries. The outcome of this was the Association for the Education of Women, organised in 1878, its object being ' to establish and maintain a system of instruction having general reference to the Oxford examinations/ Here as at Cambridge the next step was to found halls of residence to accommodate students from a distance. Two of these, Somerville and Lady Margaret, were opened in the same year, 1879; since then two more, St. Hugh's and St. Hilda's, have been added. The great difference, however, between the arrangements at the two Universities is that the Oxford Association, instead of amalgamating with the halls, has continued an independent existence, taking the lead in all matters concerning women's education. Most associations of this kind were temporary bodies, which dissolved when the college or school for which they were working was established, or when the particular institution with which they were connected had opened its doors to women. But the Oxford Association has increased in importance with the development of the colleges, and has become a Board of Studies for their students, and a means of communication between them and the University. One of its functions is to organise lectures, to which members of the University not infrequently request and obtain admission. It also undertakes the negotiations with the various professors and colleges that admit women to lectures, and it is thanks to its exertions that they may now attend under certain regulations lectures at almost every college in Oxford. Similarly their

admission to university examinations is the work of the Association. In fact, it acts almost as a feminine department of the University, since it has to sanction the establishment of halls, make itself responsible for the studies and discipline of its students, and generally establish their connection with the University. This connection received its formal acknowledgment in 1893, when the Dean of Christchurch was appointed to represent the Hebdomadal Council on the Council of the Association, and a room in the Clarendon Building was lent it as an office.

There are some other technical differences between the position of women at Oxford and Cambridge. The latter directly acknowledges the women's colleges, the former in theory knows nothing of its women students, but leaves the Delegacy for Local Examinations to arrange for their examination. The delegates are allowed for this purpose to use the papers set by the University examiners for men, and, of course, the examinations are conducted simultaneously and under exactly the same conditions. Women may enter for every examination whether Pass or Honours leading to the B.A. degree, and it is this Delegacy which lays down the special conditions. In all cases a Preliminary examination is compulsory and in some an Intermediate, but neither the Delegacy nor the University demands that they should conform to the regulations imposed on men in regard to duration of study, preliminary examinations and residence. This has led to greater freedom in work ; but, as often happens, this greater liberty has proved somewhat detrimental. It was difficult to gauge the value of work done under such conditions, since some students would end a four years' course with Moderations and others at once begin working for the Final Schools. Then there were some special examinations for women, which by that very restriction failed to win even the prestige they deserved, and an impression, not quite unfounded, spread abroad, of a certain vagueness in the Oxford work, which lessened its value in the eyes of the general public. There was no real gain in making a selection from a course that had been carefully planned out by the University for its members, and as this anomalous state of things had really been brought about by the gradual opening of the examinations, which made the regular course at first inaccessible to women students, there seemed no reason for continuing

it when once this difficulty was removed. Oxford women got less credit often than was their due, simply because some little preliminary formality had been omitted.

In order to remedy this, and put the whole work on a firmer basis, the Association decided to institute a system of diplomas for those of its students who have taken the full course required of members of the University. This certificate is awarded only to students who have entered their names on the register qualifying for it, have kept their residence after date of entry, and passed the examinations of the B.A. course in the order and under the conditions as to standing prescribed for members of the University. Another diploma is also offered to those who have passed a course of three examinations approved by the council. Though equivalent to the B.A. diploma as regards difficulty of attainment, there appears to be little demand among recent students for this alternative course ; and it will probably be regarded as a survival from the days when, the University examinations being only partially open to women, substitutes had in some cases to be devised. Certificates are also awarded to those students who have resided not less than eight terms, and have obtained a class in an Honour Examination of the University or of the Delegates of Local Examinations. These diplomas and certificates offer a definite incentive to regular study, and serve at once to show the value of the work done in each case.

At Oxford, as at Cambridge, an attempt has been made to win complete acknowledgment for women students by the conferment of the degree. An appeal was made to the University in 1895. The question came to the vote in 1896, and here, as afterwards at Cambridge, the proposal was thrown out by a considerable majority. Oxford women, like their sisters at Cambridge, must therefore wait a while longer for complete recognition. The attempt here may have been a little premature, since, owing to the late opening of the examinations and the latitude allowed to students, there were at that time very few who had fulfilled all the necessary conditions. Still the reason of the refusal was probably identical in both cases, and indicated a deep-rooted prejudice that must be overcome before further steps can be taken. Meantime the institution of the degree-certificate is

giving fresh impetus to the work, and attracting larger numbers to the colleges.

Of these Somerville and Lady Margaret were founded almost simultaneously, but with somewhat different aims, the former being undenominational, the latter distinctly Church of England. Both were intended as halls of residence for Association students, but in 1881 Somerville was incorporated as a college 'to provide for the residence of women students ' as well as ' for the instruction of women students and for the delivery of lectures to such students'; it was not, however, till 1894 that the term ' college ' came into general use. Like the Cambridge colleges it has grown from small beginnings ; it has been enlarged four times, not on one plan but by the addition of fresh buildings, so that it does not present the appearance of a connected whole. But standing in pleasant grounds among fine old trees, this very medley gives it a certain charm. It can now accommodate over seventy students, besides the Principal, secretary, and four resident tutors. Many of its old students have gained honourable positions for themselves ; indeed the Principals of two leading women's colleges, Holloway and Bedford, were chosen from the ranks of old Somerville students.

Lady Margaret was founded by the Bishop of Eochester and others, and has adhered to its original plan of supplying residence to Church members of the Association. It undertakes no part of the instruction, but makes use of the Association's tutorial and lecturing staff. For some years the numbers continued small, but as they gradually increased it became necessary to construct an additional hall. Part of this, the Wordsworth building, was occupied in 1896, when the numbers went up to forty-nine, and the council are now appealing for additional funds with which to build a chapel and the central block, to contain the library and permanent dining-hall. A pretty thatched boat-house on the Cherwell is an attractive feature of the grounds, and Lady Margaret is proud of its rowing club. The Principal is Miss Wordsworth, daughter of the late Bishop of Lincoln and great-niece of the poet. The hall takes its name from Lady Margaret Beaufort, that renowned patroness of learning, and there is a cast from her effigy in the tiny college chapel.

In close connection with Lady Margaret is St. Hugh's. It was founded in 1886 by Miss Wordsworth to provide a more economical residence for women students. By a system of sharing bedrooms and using common sitting-rooms, somewhat lower fees became practicable for those who could not afford the ordinary terms. The plan does not seem to have proved very successful, and St. Hugh's has developed into a small independent hall for twenty-five students, on the same lines as Lady Margaret, but with a graduated system of fees according to the room occupied. Like Lady Margaret it is conducted according to the principles of the Church of England, with liberty for other denominations. It also uses the tutorial staff of the Association. All students are expected to read for some University examination unless specially exempted by the Council. The Principal is Miss Moberly, daughter of the late Bishop of Salisbury.

The youngest of the Oxford halls is St. Hilda's. It was founded by Miss Beale in 1893, and meant in the first instance for students passing on from Cheltenham to Oxford. This exclusive character has, however, been abandoned, and it is now formally recognised under the rules of the Association for the Education of Women. It still receives the greater part of its students from Cheltenham, though there is nothing now to exclude others. As yet the numbers are very small. The Principal is Mrs. Burrows.

Of these four institutions, Somerville, the largest and most distinguished, is the only undenominational one. All four have the combined bedroom-studies, with common dining-halls, libraries, etc. Out-door games, debating societies, college clubs, etc. are as popular as at Cambridge. All the colleges require an entrance examination or an alternative, and all give scholarships according to ability. The fees at Somerville (including board, lodging, tuition and lectures) range from 78 to 90 according to the room occupied. At Lady Margaret they are 75, exclusive of tuition, which involves another 20 or 25. At St. Hugh's the inclusive terms range from 70 to 90; at St. Hilda's as at Lady Margaret, there is a charge of 75, which does not include tuition.

Besides those who reside at the halls other women

are frequently attracted to Oxford. For these, too, the Association makes provision. Those who avail themselves of the lectures and direction of the Association, but do not reside in a hall, are registered as home students, and are placed under the care of a Principal and a committee of the Council of the Association. They are required to reside, with the Principal's approval, in a house sanctioned by the committee, and to conform to certain rules corresponding to those laid down for hall students. The Principal performs some of the functions of a tutor. Students call upon her at the beginning and end of each term, and submit to her their lists of lectures before sending them in to the office. The home students are doubtless able to pursue their studies more economically. The tuition fees seldom exceed 25, and board and lodging may be had for 25s. a week and upwards. As Oxford terms rarely exceed eight weeks it is possible by very careful management to keep expenses down to 50 to 60. As a matter of fact a large proportion of these students are daughters of Oxford residents. The arrangement is also a convenient one for foreigners who come to Oxford for a short time only. Many come in this way from America, after taking a degree in one of their own colleges. French, German, Russian, Roumanian, Danish, Swedish, and Norwegian students have at different times resided in Oxford, working at English language and literature, for the teaching diplomas of their own country. By helping these the Association can considerably increase its sphere of usefulness, and without disturbing the work of the halls it introduces a wider outlook into the lives of the students. At the same time it is open to home students to take the regular course, and several of them do so. The committee only registers those who take up a systematic course of study, extending over at least three terms, but even those who come for a shorter time can attend its lectures and profit by its help.

By these varied means the Association is able to draw together all the agencies for women's education at Oxford; in 1897 the number of students on its books was 202, and there is every reason to expect a considerable increase now that the institution of the degree-diploma has given a fresh impulse to the work. The steady flow from our girls' schools to both Universities proves that the colleges have won

appreciation through the whole of the country.
Happily many of the founders are yet among us to
enjoy the fruits of the labours. Girton and Newnham,
Somerville and Lady Margaret, bear eloquent testi-
mony to the truth that the dreamers of visions are
often those who see furthest and best.

https://archive.org/stream/renaissanceofgir00zimmerich/renaissanceofgir00zimmerich_djvu.txt

ISAAC AND ALICE

The Project Gutenberg eBook, *From the Heart of Israel*, by Bernard Drachman

They were good friends and true, were Isaac and Alice. To be sure, they were not exactly what most people would consider a well-assorted or naturally allied pair; for Isaac was a great strapping fellow of about thirty, who could speak Yiddish much better than English, while Alice was a sweet little girl of not quite five, whose childish prattle had a decidedly Yankee twang, and whose cradle had stood many thousands of miles from the spot where Isaac's infantile eyes had first opened upon a strange and troublesome world. Yet that they were close friends was an undeniable, if somewhat unaccountable, fact. People who saw the stalwart young Lithuanian Hebrew carpenter, with the dark ringlets and raven beard and the golden-haired and blue-eyed little Down East maiden as they sat together and conversed during the midday hour when Isaac was eating his frugal lunch, or as they sauntered hand in hand through the streets of the little Massachusetts town, would often smile and wonder and make comments, sometimes jocular and sometimes sarcastic to each other; but neither Isaac nor Alice cared what anybody said. They were not afraid of scandal and were sublimely indifferent to public opinion. They were just good friends and that was all about it. They had been good friends from the first moment they met, several weeks after Isaac had set foot upon the hospitable shore of America, and had exhausted the greater part of his physical energy and about all of his financial resources and of his store of courage and hope in the effort to persuade the land of the free and the home of the brave to provide him with a livelihood. He had entered at the port of New York and tried for a week or so to find employment at his trade in the metropolis. But there must have been a plethora of carpenters in the great city at that time; for wherever he applied, the answer was the same, "No one wanted." He had then determined to try the smaller towns and cities, and had wandered on foot through Connecticut, and had applied at hundreds of shops in the many industrial communities of that State, all the time growing fainter and weaker and more discouraged; and had never heard any other response to his request for work than the same monotonous refrain, which had now grown terrible in its suggestion of despair, "No one wanted."

At last he had drifted, he hardly knew how, into Massachusetts and had entered the little town of Atbury. Hope had almost left him, and grim thoughts of suicide filled his mind while he wandered aimlessly through the neat and well-kept streets of the town. In the course of his wanderings he saw a wooden building, upon the front of which a large sign proclaimed that within was a carpenter shop, and that the owner's name was Thomas Jones. Mechanically Isaac entered the large open doorway on his usual quest. He had no anticipation of success; and when Mr. Jones, who was a handsome middle-aged man of typical Yankee appearance and very brusque and short-spoken, returned the usual answer to his timid query, he turned to go away with a sinking heart, in which the dull pain was not perceptibly keener than it had previously been.

But this time an unprecedented incident occurred. A pretty little blond-haired, blue-eyed girl, a mere tot, was standing next to the proprietor when the stranger entered the shop, and she gazed at his handsome though careworn features while he made his pitiable appeal for work, with an expression of evident liking, mingled with sympathy and pity. When he turned to depart, surprise and sorrow showed themselves plainly in the face of the child; and turning to her father—as you have, no doubt, already guessed, sweet reader, it was Alice, Thomas Jones’s only and dearly beloved child—she said: “Why, aren’t you going to give the poor man work, papa? Just see how sad he looks. Don’t let him go.”

“Do you want me to keep him, little one?” asked the father, gazing at the pleading face of his little daughter with amused parental fondness.

“Yes I do, papa,” said Alice. “I think he is a very good man and I want you to keep him.”

“Well,” said Thomas Jones, “for your sake I’ll give him a chance.”

Isaac was not yet out of the shop and the loud voice of the master carpenter at once brought him back. He speedily demonstrated his ability in his trade and was retained, his employer impressing upon him that it was the intercession of the little girl which had given him his opportunity. Isaac bowed low before the child with reverential gratitude and imprinted upon her tiny hand a grateful kiss. Thus began their friendship, and it became very warm and sincere indeed. Alice took naturally to the broadshouldered, pleasant-faced young foreigner; and Isaac, who was not only deeply grateful to the child for having steered the almost shipwrecked vessel of his life into the safe harbor of employment and bread, but was also thoroughly social and companionable by disposition, did all in his power to amuse and entertain his young benefactor. They were not allowed to meet during work hours, for Father Jones, though a loving and indulgent parent, was a strict and uncompromising task-master, and would tolerate no unbusiness-like interruptions during the time allotted to work; but during the noonday intermission for meals, when Alice would seek Isaac in whatever part of the town he happened to be employed after the close of work in the late afternoon, when Isaac returned to his master’s house where was his home, they were sure to be together, and would romp and “carry on” to their heart’s content. Nothing pleased them better than a “horsey-back” ride, when Isaac would act as the fiery though remarkably docile steed, and Alice rode her mount in greater security than the most practised equestrienne. Isaac would trot and gallop, and pace and paw, and prance and snort, and whinny and neigh, like the very war-horse of Job, all the time holding his little rider in a firm and loving grasp; while Alice, with streaming locks and flashing eyes, would cry “Gee-up!” and “Whoa!” and pull his hair for reins and belabor his shoulders with her tiny fists, according to the most approved rules of the equestrian art. There were plenty of other forms of amusement as well. Sometimes they would play “blind-man’s buff,” when Isaac would begin the game by permitting himself to be tightly bandaged across the eyes, and would then grope around the room in an endeavor to catch Alice. But somehow or other he was always very clumsy in this game; and Alice never had the least trouble to avoid his aimless reachings out, and would enjoy herself highly, slipping in and out right in front of his very face and touching him on all sides. And when finally his hand would land on Alice, apparently by accident, and capture her, and it would be her turn to submit to be bandaged and to try to capture him, he seemed even clumsier in his movements. He never seemed to know how to evade the “blind man,” but was continually getting in the way; and in two or three minutes at the utmost, Alice’s tiny hands would seize him in their firm grasp, and her shrill cry of triumph would proclaim that he was a prisoner. He also taught Alice some queer Russian games, which were a source of never-failing amazement and amusement (about equally divided) to all the boys and girls in the neighborhood. Then sometimes on a holiday, or when work happened to be slack, they would go out

together berrying, and would come home with big canfuls of blackberries, or blueberries, or huckleberries, or raspberries, or some of the other sorts of berries which grew at the roadsides or in the fields, Alice looking very happy, and Isaac rather tired and scratched about the hands; for it was an open secret that while Alice had most of the fun, Isaac had most of the trouble, and worked his very hardest to fill the can with the ripest and finest berries that could be found, so that the expedition should be properly fruitful of results. In these and a hundred other ways Isaac endeavored to please his employer's little daughter, and his efforts were highly successful, so successful, indeed, that the child grew to look upon him with warm affection, and was never so happy as when in his company.

Nor was Alice the only one who regarded Isaac with affection. Her parents were almost equally warm in their sentiments. Thomas Jones thought much of him because he was a thorough master of his trade, tremendously strong, and absolutely faithful and reliable. Any task assigned to him, however arduous, 175 was always performed with scrupulous exactness and conscientiousness, and no complaint or objection ever escaped his lips. Mrs. Jones liked him because he was sober, polite, and cleanly in his habits, and because he took such pains to please and amuse her little daughter. To be sure, there were some points about him which they did not exactly like, but his many good qualities counterbalanced these defects. One of these points was that he would not labor on the Sabbath or Jewish holidays. This difficulty had arisen the very first week of his employment, but the superior character of his work had induced Mr. Jones then to retain him, and afterward he had grown accustomed to dispensing with the services of Isaac on Saturdays or on any other day when he declared the rules of his religion required abstention from labor. Another matter which seemed very peculiar to both Mr. and Mrs. Jones was that, although Isaac boarded with them, he never ate flesh in any form and refused to partake of many other dishes which appeared on their table. But, as the Joneses were kind-hearted and tolerant people, and had besides a genuine liking for Isaac, they overlooked these matters, and, if they reflected on them at all, merely thought them the natural result of his religious views.

176 Many were the arguments which the Joneses had with some of their neighbors on account of Isaac and the peculiar position which he occupied in their household. Bigotry and narrow-mindedness are not unknown even in free America, where, theoretically, a man's race and religion should have no influence, favorable or unfavorable, upon the opinion which is held concerning him, and where, if anywhere, the principle enunciated by the rabbis in the Talmud should prevail—"Thy deeds shall recommend thee, thy deeds shall condemn thee." Some of the good Christian people of Atbury, who thought, like Sancho Panza, that the most essential characteristic of a Christian was a sound hatred of the Jews, could not conceal their amazement, nay, their righteous indignation, that a Jew should be a favored member of a Christian household, and, worse yet, the trusted friend and companion of a little Christian maiden.

"How can you permit an unbeliever to dwell in your home?" they would say, with much show of holy horror. "Aren't you afraid that in course of time he may seduce you or your little daughter, with specious reasoning, away from the true faith, and lead you into the error of Judaism?" But the Joneses would only laugh at these pious apprehensions and answer 177 that Isaac never spoke to them on religious subjects; that, while he was undoubtedly sincerely religious in his own way, he never obtruded his views on others; and that, in fact, it would not have been a bad thing if some people whom they knew would have imitated him in this particular.

The neighbors would then try another tack, in which they hoped to be more successful. "How can you trust Alice to such a person?" they would ask, with the solemn air of those who warn friends against impending dangers which they are rashly incurring. "Aren't you afraid that he may do her some harm? You never can tell what such a Jew might do. Why, in some parts of Europe they even accuse them of

slaying Christian children in order to use their blood for the Passover. It isn't safe to leave Alice in his charge."

But when they came with this argument they received a fitting response, which was not lacking either in clearness or emphasis. The Joneses, particularly Mrs. Jones, told them that they might be at better business than calumniating one of whom they knew no evil; that Isaac was the kindest, best-hearted, most devoted fellow in the world; that he was deeply grateful to Alice because she had been the means of saving him from starvation, and, as for her being in any danger at his hands, why they, the Joneses, were convinced that he would at any time be ready to give his life rather than see a hair of her head harmed.

Sooner than any one anticipated the opportunity came which demonstrated that Isaac was indeed ready to lay down his life to save his little friend from harm. A few days after an unusually warm debate of the kind outlined above between Thomas Jones and an especially zealous neighbor, who had warned Isaac's employer that all kinds of dreadful things would certainly happen if this unholy friendship were permitted to continue, Jones summoned Isaac to him. "Come here, you Jew!" he said half jocularly, half angrily, for the remembrance of the uncharitable words of his officious neighbor was still strong in him. "I want to show you what I think of you." Isaac at once advanced and waited with deferential air for the further words of his employer. "I've got a job in the outskirts of the town," continued Jones, gazing with satisfaction at the brawny figure and submissive attitude of his most reliable workman, "and, as I can't spare any men from the other work, I'm going to put the whole thing in your hands. There's a little cottage on the Prentice place that's got to be jacked up to make room for the masons to build a new foundation, and then all the board work and carpentering generally must be renovated and fixed up. I've sent up all the necessary wood already, so you can go right up and attend to the whole job alone. When you get there you can see for yourself what is to be done, and if you don't understand anything, why, just ask old man Prentice, and he'll tell you what to do."

Isaac picked up his box of tools and was about to depart when little Alice, who had been listening to the words of her father, skipped up and, laying her hand on Isaac's arm, asked eagerly: "Won't you take me along, Isaac? I want to be with you when you're doing the work."

"Ask your papa, Alice," said Isaac, smiling pleasantly at his little friend. "If he will let you go, then I'll be glad to take you."

Alice did not need to ask her father, for the latter, without giving her the opportunity to speak, at once gave her the desired permission. "Yes, indeed, you can go with Isaac," he said, with rather more emphasis than was apparently necessary. "I'll just show those numbskull bigot neighbors of mine what I think of their fanatical suspicions and insinuations. Just trot along, little one, and I wish you lots of pleasure seeing Isaac at work."

Thus duly authorized and permitted, Isaac and Alice went off together to the scene of his solitary task, which they reached in about half an hour. The Prentice place was a little farm of two or three acres, in the centre of which stood the cottage. It was not a very large structure, but Isaac's practised eye at once perceived that his employer had set him a task sufficient to try the strength of three men. Old man Prentice was of the same opinion, and very emphatically expressed his dissatisfaction that Jones had sent only one man to do the work of three. Nothing daunted, however, Isaac at once set about the performance of his task. The first thing to do was to lift the structure, which was done by means of appliances called jacks. Isaac inserted one of the jacks under each of the four corners of the house and screwed it up until that part of the building was elevated to the desired height. In the mean while Alice

stood near her favorite and watched him at his arduous task, chatting and prattling all the while with the careless innocence of childhood; and Isaac, though engrossed in his labor, did not fail to answer her childish queries, and kept his little friend interested and amused. All went well until Isaac came to the fourth and last corner and proceeded to jack it up as he had done the others. Here, by some miscalculation, he raised the corner a foot or so more than was necessary. At once the frame structure began to careen. Isaac instantly perceived that the building would certainly topple to the ground, and a pang of agony shot through his heart as he thought of the loss which his mistake, unaccountable even to himself, would cause. His next thought was to save himself from harm; but, as he turned to flee from under the falling structure, what horrible sight met his eyes! Little Alice, petrified apparently by fright, was standing motionless under the tottering building. A sickening picture flashed up instantly before his mental retina of her little body lying crushed and bleeding under the ruins of the building, its life crushed out by the overwhelming weight. How could he save her? She was too far away for him to seize her and flee with her to safety, neither would it avail aught to shout to her to flee. Before she could have recovered control of her faculties and impelled her limbs to motion, the blow would have fallen and all would be over. There was but one way to save Alice, and, though Isaac knew it meant almost certain death for himself, he instantly determined to do it. Placing his powerful shoulders under the tilting woodwork, he shouted in a great and terrible voice to Alice to run—run for her life. For a minute or so he stood, like fabled Atlas upholding the world, supporting with his tremendous strength the falling structure, while his muscles stood out like whipcords and the sweat of agony poured all over his body. In that minute Alice recovered herself and toddled out of harm's way. A second later the heavy framework crushed out the man's strength and bore him to the ground with a sickening thud, while the harsh crackling of the beams and boards as they were torn from their fastenings mingled with his awful shriek. He did not need to lie there long. Poor little Alice, with an intelligence beyond her years, ran to seek help from the neighbors; but her frenzied efforts were not necessary. The frightful crash of the falling building and the fierce, agonized shriek of the stricken victim had aroused all the neighborhood, and from all sides assistance speedily came. The united efforts of old man Prentice and a number of laborers who hastened from a neighboring field speedily succeeded in removing the mass of beams and boards and odds and ends of woodwork from the body of Isaac, and tenderly they laid him upon a temporary couch formed of their coats. He was crushed and maimed and bloody, every limb broken, and his features disfigured almost beyond recognition, but he was conscious and a happy smile played upon his face when he saw that Alice had escaped all injury and was safe and sound.

“Come to me, little darling,” he said, in barely audible tones, gazing wistfully at the child-friend for whom he had given his life; “come and bid me good-bye, for I feel that I must go. I do not complain because God is calling me away, but I am glad your young life is spared to be a joy to yourself and your dear parents for many years to come.” And his young friend, with strangely grave and solemn face, went to her dying protector and clasped his hand and kissed his blood-stained and distorted features, and called him her own dear Isaac, and begged him not to die, while the strong men who stood around bowed their heads in reverent sorrow and silently wept. Then they bore him home, and Alice's parents, when they heard the story of what he had done, knew not of which feeling their hearts were fuller—of gratitude that their darling daughter was safe or of admiration for the pure and self-sacrificing friendship which Isaac had so heroically displayed and sorrow for his untimely end. He had relapsed into semi-consciousness and lay for several hours without speaking on his couch. Then he stirred uneasily and feebly beckoned to his employer, indicating that he desired to communicate something to him. Thomas Jones, who had not left the room since first Isaac had been brought home, at once went to the bedside, and putting his ear to the mouth of the dying man, heard him say in a feeble voice: “Dear master, promise me one favor. I die a Jew. Have me laid away among my people.”

And Thomas Jones answered: “Isaac, I promise.”

A look of infinite content and gratitude lit up Isaac's face. Then, rising slightly on his side, he recited in Hebrew, in a clear though feeble voice, the words of the Jewish ritual for the dying: "Hear, O Israel, the Lord our God, the Lord is one. Blessed be the glorious name of Thy kingdom for ever and ever. Into Thy hands I deliver my spirit. Thou hast redeemed me, O Lord, God of truth." And so he passed away.

Every year, on the anniversary of Isaac's death, Alice, now a maiden ripening into womanhood, visits Isaac's grave in the Jewish cemetery in Boston in which he rests; and if sincere tears and true sorrow are acceptable in the sight of God, then is her offering indeed acceptable and holy.

POLYCHROME'S PITIFUL PLIGHT

The Project Gutenberg EBook of *Tik-Tok of Oz*, by L. Frank Baum

The Rain King got too much water in his basin and spilled some over the brim. That made it rain in a certain part of the country—a real hard shower, for a time—and sent the Rainbow scampering to the place to show the gorgeous colors of his glorious bow as soon as the mist of rain had passed and the sky was clear.

The coming of the Rainbow is always a joyous event to earth folk, yet few have ever seen it close by. Usually the Rainbow is so far distant that you can observe its splendid hues but dimly, and that is why we seldom catch sight of the dancing Daughters of the Rainbow.

In the barren country where the rain had just fallen there appeared to be no human beings at all; but the Rainbow appeared, just the same, and dancing gayly upon its arch were the Rainbow's Daughters, led by the fairylike Polychrome, who is so dainty and beautiful that no girl has ever quite equalled her in loveliness.

Polychrome was in a merry mood and danced down the arch of the bow to the ground, daring her sisters to follow her. Laughing and gleeful, they also touched the ground with their twinkling feet; but all the Daughters of the Rainbow knew that this was a dangerous pastime, so they quickly climbed upon their bow again.

All but Polychrome. Though the sweetest and merriest of them all, she was likewise the most reckless. Moreover, it was an unusual sensation to pat the cold, damp earth with her rosy toes. Before she realized it the bow had lifted and disappeared in the billowy blue sky, and here was Polychrome standing helpless upon a rock, her gauzy draperies floating about her like brilliant cobwebs and not a soul—fairy or mortal—to help her regain her lost bow!

"Dear me!" she exclaimed, a frown passing across her pretty face, "I'm caught again. This is the second time my carelessness has left me on earth while my sisters returned to our Sky Palaces. The first time I enjoyed some pleasant adventures, but this is a lonely, forsaken country and I shall be very unhappy until my Rainbow comes again and I can climb aboard. Let me think what is best to be done."

She crouched low upon the flat rock, drew her draperies about her and bowed her head.

It was in this position that Betsy Bobbin spied Polychrome as she came along the stony path, followed

by Hank, the Princess and Shaggy. At once the girl ran up to the radiant Daughter of the Rainbow and exclaimed:

"Oh, what a lovely, lovely creature!"

Polychrome raised her golden head. There were tears in her blue eyes.

"I'm the most miserable girl in the whole world!" she sobbed.

The others gathered around her.

"Tell us your troubles, pretty one," urged the Princess.

"I—I've lost my bow!" wailed Polychrome.

"Take me, my dear," said Shaggy Man in a sympathetic tone, thinking she meant "beau" instead of "bow."

"I don't want you!" cried Polychrome, stamping her foot imperiously; "I want my Rainbow."

"Oh; that's different," said Shaggy. "But try to forget it. When I was young I used to cry for the Rainbow myself, but I couldn't have it. Looks as if you couldn't have it, either; so please don't cry."

Polychrome looked at him reproachfully.

"I don't like you," she said.

"No?" replied Shaggy, drawing the Love Magnet from his pocket; "not a little bit?—just a wee speck of a like?"

"Yes, yes!" said Polychrome, clasping her hands in ecstasy as she gazed at the enchanted talisman; "I love you, Shaggy Man!"

"Of course you do," said he calmly; "but I don't take any credit for it. It's the Love Magnet's powerful charm. But you seem quite alone and friendless, little Rainbow. Don't you want to join our party until you find your father and sisters again?"

"Where are you going?" she asked.

"We don't just know that," said Betsy, taking her hand; "but we're trying to find Shaggy's long-lost brother, who has been captured by the terrible Metal Monarch. Won't you come with us, and help us?"

Polychrome looked from one to another of the queer party of travelers and a bewitching smile suddenly lighted her face.

"A donkey, a mortal maid, a Rose Princess and a Shaggy Man!" she exclaimed. "Surely you need help, if you intend to face Ruggedo."

"Do you know him, then?" inquired Betsy.

"No, indeed. Ruggedo's caverns are beneath the earth's surface, where no Rainbow can ever penetrate. But I've heard of the Metal Monarch. He is also called the Nome King, you know, and he has made trouble for a good many people—mortals and fairies—in his time," said Polychrome.

"Do you fear him, then?" asked the Princess, anxiously.

"No one can harm a Daughter of the Rainbow," said Polychrome proudly. "I'm a sky fairy."

"Then," said Betsy, quickly, "you will be able to tell us the way to Ruggedo's cavern."

"No," returned Polychrome, shaking her head, "that is one thing I cannot do. But I will gladly go with you and help you search for the place."

This promise delighted all the wanderers and after the Shaggy Man had found the path again they began moving along it in a more happy mood. The Rainbow's Daughter danced lightly over the rocky trail, no longer sad, but with her beautiful features wreathed in smiles. Shaggy came next, walking steadily and now and then supporting the Rose Princess, who followed him. Betsy and Hank brought up the rear, and if she tired with walking the girl got upon Hank's back and let the stout little donkey carry her for awhile.

At nightfall they came to some trees that grew beside a tiny brook and here they made camp and rested until morning. Then away they tramped, finding berries and fruits here and there which satisfied the hunger of Betsy, Shaggy and Hank, so that they were well content with their lot.

It surprised Betsy to see the Rose Princess partake of their food, for she considered her a fairy; but when she mentioned this to Polychrome, the Rainbow's Daughter explained that when Ozga was driven out of her Rose Kingdom she ceased to be a fairy and would never again be more than a mere mortal. Polychrome, however, was a fairy wherever she happened to be, and if she sipped a few dewdrops by moonlight for refreshment no one ever saw her do it.

As they continued their wandering journey, direction meant very little to them, for they were hopelessly lost in this strange country. Shaggy said it would be best to go toward the mountains, as the natural entrance to Ruggedo's underground cavern was likely to be hidden in some rocky, deserted place; but mountains seemed all around them except in the one direction that they had come from, which led to the Rose Kingdom and the sea. Therefore it mattered little which way they traveled.

By and by they espied a faint trail that looked like a path and after following this for some time they reached a crossroads. Here were many paths, leading in various directions, and there was a signpost so old that there were now no words upon the sign. At one side was an old well, with a chain windlass for drawing water, yet there was no house or other building anywhere in sight.

While the party halted, puzzled which way to proceed, the mule approached the well and tried to look into it.

"He's thirsty," said Betsy.

"It's a dry well," remarked Shaggy. "Probably there has been no water in it for many years. But, come; let us decide which way to travel."

No one seemed able to decide that. They sat down in a group and tried to consider which road might be the best to take. Hank, however, could not keep away from the well and finally he reared up on his hind legs, got his head over the edge and uttered a loud "Hee-haw!" Betsy watched her animal friend curiously.

"I wonder if he sees anything down there?" she said.

At this, Shaggy rose and went over to the well to investigate, and Betsy went with him. The Princess and Polychrome, who had become fast friends, linked arms and sauntered down one of the roads, to find an easy path.

"Really," said Shaggy, "there does seem to be something at the bottom of this old well."

"Can't we pull it up, and see what it is?" asked the girl.

There was no bucket at the end of the windlass chain, but there was a big hook that at one time was used to hold a bucket. Shaggy let down this hook, dragged it around on the bottom and then pulled it up. An old hoopskirt came with it, and Betsy laughed and threw it away. The thing frightened Hank, who had never seen a hoopskirt before, and he kept a good distance away from it.

Several other objects the Shaggy Man captured with the hook and drew up, but none of these was important.

"This well seems to have been the dump for all the old rubbish in the country," he said, letting down the hook once more. "I guess I've captured everything now. No—the hook has caught again. Help me, Betsy! Whatever this thing is, it's heavy."

She ran up and helped him turn the windlass and after much effort a confused mass of copper came in sight.

"Good gracious!" exclaimed Shaggy. "Here is a surprise, indeed!"

"What is it?" inquired Betsy, clinging to the windlass and panting for breath.

For answer the Shaggy Man grasped the bundle of copper and dumped it upon the ground, free of the well. Then he turned it over with his foot, spread it out, and to Betsy's astonishment the thing proved to be a copper man.

"Just as I thought," said Shaggy, looking hard at the object. "But unless there are two copper men in the world this is the most astonishing thing I ever came across."

At this moment the Rainbow's Daughter and the Rose Princess approached them, and Polychrome said:

"What have you found, Shaggy One?"

"Either an old friend, or a stranger," he replied.

"Oh, here's a sign on his back!" cried Betsy, who had knelt down to examine the man. "Dear me; how

funny! Listen to this."

Then she read the following words, engraved upon the copper plates of the man's body:

SMITH & TINKER'S
Patent Double-Action, Extra-Responsive,
Thought-Creating, Perfect-Talking
MECHANICAL MAN
Fitted with our Special Clockwork Attachment.
Thinks, Speaks, Acts, and Does Everything but Live.

"Isn't he wonderful!" exclaimed the Princess.

"Yes; but here's more," said Betsy, reading from another engraved plate:

DIRECTIONS FOR USING:

For THINKING:—Wind the Clockwork
Man under his left arm, (marked No. 1).
For SPEAKING:—Wind the Clockwork
Man under his right arm, (marked No. 2).
For WALKING and ACTION:—Wind Clockwork Man
in the middle of his back, (marked No. 3).

N. B.—This Mechanism is guaranteed to
work perfectly for a thousand years.

"If he's guaranteed for a thousand years," said Polychrome, "he ought to work yet."

"Of course," replied Shaggy. "Let's wind him up."

In order to do this they were obliged to set the copper man upon his feet, in an upright position, and this was no easy task. He was inclined to topple over, and had to be propped again and again. The girls assisted Shaggy, and at last Tik-Tok seemed to be balanced and stood alone upon his broad feet.

"Yes," said Shaggy, looking at the copper man carefully, "this must be, indeed, my old friend Tik-Tok, whom I left ticking merrily in the Land of Oz. But how he came to this lonely place, and got into that old well, is surely a mystery."

"If we wind him, perhaps he will tell us," suggested Betsy. "Here's the key, hanging to a hook on his back. What part of him shall I wind up first?"

"His thoughts, of course," said Polychrome, "for it requires thought to speak or move intelligently."

So Betsy wound him under his left arm, and at once little flashes of light began to show in the top of his head, which was proof that he had begun to think.

"Now, then," said Shaggy, "wind up his phonograph."

"What's that?" she asked.

"Why, his talking-machine. His thoughts may be interesting, but they don't tell us anything."

So Betsy wound the copper man under his right arm, and then from the interior of his copper body came in jerky tones the words: "Ma-ny thanks!"

"Hurrah!" cried Shaggy, joyfully, and he slapped Tik-Tok upon the back in such a hearty manner that the copper man lost his balance and tumbled to the ground in a heap. But the clockwork that enabled him to speak had been wound up and he kept saying: "Pick-me-up! Pick-me-up! Pick-me-up!" until they had again raised him and balanced him upon his feet, when he added politely: "Ma-ny thanks!"

"He won't be self-supporting until we wind up his action," remarked Shaggy; so Betsy wound it, as tight as she could—for the key turned rather hard—and then Tik-Tok lifted his feet, marched around in a circle and ended by stopping before the group and making them all a low bow.

"How in the world did you happen to be in that well, when I left you safe in Oz?" inquired Shaggy.

"It is a long sto-ry," replied Tik-Tok, "but I'll tell it in a few words. Af-ter you had gone in search of your broth-er, Oz-ma saw you wan-der-ing in strange lands when-ev-er she looked in her mag-ic pic-ture, and she also saw your broth-er in the Nome King's cavern; so she sent me to tell you where to find your broth-er and told me to help you if I could. The Sor-cer-ess, Glin-da the Good, trans-port-ed me to this place in the wink of an eye; but here I met the Nome King him-self—old Rug-ge-do, who is called in these parts the Met-al Mon-arch. Rug-ge-do knew what I had come for, and he was so an-gry that he threw me down the well. Af-ter my works ran down I was help-less un-til you came a-long and pulled me out a-gain. Ma-ny thanks."

"This is, indeed, good news," said Shaggy. "I suspected that my brother was the prisoner of Ruggedo; but now I know it. Tell us, Tik-Tok, how shall we get to the Nome King's underground cavern?"

"The best way is to walk," said Tik-Tok. "We might crawl, or jump, or roll o-ver and o-ver until we get there; but the best way is to walk."

"I know; but which road shall we take?"

"My ma-chin-er-y is-n't made to tell that," replied Tik-Tok.

"There is more than one entrance to the underground cavern," said Polychrome; "but old Ruggedo has cleverly concealed every opening, so that earth dwellers can not intrude in his domain. If we find our way underground at all, it will be by chance."

"Then," said Betsy, "let us select any road, haphazard, and see where it leads us."

"That seems sensible," declared the Princess. "It may require a lot of time for us to find Ruggedo, but we have more time than anything else."

"If you keep me wound up," said Tik-Tok, "I will last a thou-sand years."

"Then the only question to decide is which way to go," added Shaggy, looking first at one road and then at another.

But while they stood hesitating, a peculiar sound reached their ears—a sound like the tramping of many feet.

"What's coming?" cried Betsy; and then she ran to the left-hand road and glanced along the path. "Why, it's an army!" she exclaimed. "What shall we do, hide or run?"

"Stand still," commanded Shaggy. "I'm not afraid of an army. If they prove to be friendly, they can help us; if they are enemies, I'll show them the Love Magnet."

VICARIOUS ATONEMENT

Richard Aldington

War and Love (1919)

page 14

Boston: The Four Seas Company

This is an old and very cruel god ...

We will endure;
We will try not to wince
When he crushes and rends us.

If indeed it is for your sakes,
If we perish or moan in torture,
Or stagger under sordid burdens
That you may live—
Then we can endure.

If our wasted blood
Makes bright the page
Of poets yet to be;
If this our tortured life
Save from destruction's nails
Gold words of a Greek long dead;
Then we can endure,
Then hope,
Then watch the sun rise
Without utter bitterness.

But, O thou old and very cruel god,
Take, if thou canst, this bitter cup from us.

JOSHUA

Bible (Basic English) translated by Samuel Henry Hooke

1:1 Now after the death of Moses, the servant of the Lord, the word of the Lord came to Joshua, the son of Nun, Moses' helper, saying,

1:2 Moses my servant is dead; so now get up! Go over Jordan, you and all this people, into the land which I am giving to them, to the children of Israel.

1:3 Every place on which you put your foot I have given to you, as I said to Moses.

1:4 From the waste land and this mountain Lebanon, as far as the great river, the river Euphrates, and all the land of the Hittites to the Great Sea, in the west, will be your country.

1:5 While you are living, all will give way before you: as I was with Moses, so I will be with you; I will not take away my help from you or give you up.

1:6 Take heart and be strong; for you will give to this people for their heritage the land which I gave by an oath to their fathers.

1:7 Only take heart and be very strong; take care to do all the law which Moses my servant gave you, not turning from it to the right hand or to the left, so that you may do well in all your undertakings.

1:8 Let this book of the law be ever on your lips and in your thoughts day and night, so that you may keep with care everything in it; then a blessing will be on all your way, and you will do well.

1:9 Have I not given you your orders? Take heart and be strong; have no fear and do not be troubled; for the Lord your God is with you wherever you go,

1:10 Then Joshua gave their orders to those who were in authority over the people, saying,

1:11 Go through the tents and give orders to the people, saying, Get ready a store of food; for in three days you are to go over this river Jordan and take for your heritage the land which the Lord your God is giving you.

1:12 And to the Reubenites and the Gadites and the half-tribe of Manasseh, Joshua said,

1:13 Keep in mind what Moses, the servant of the Lord, said to you, The Lord your God is sending you rest and will give you this land.

1:14 Your wives, your little ones, and your cattle will be kept here in the land which Moses gave you on this side of Jordan; but you, the fighting-men, are to go over before your brothers, armed, to give them help;

1:15 Till the Lord has given your brothers rest, as he has given it to you, and they have taken their heritage in the land which the Lord your God is giving them: then you will go back to the land of your heritage which Moses, the servant of the Lord, gave you on the east side of Jordan.

1:16 Then they said to Joshua in answer, Whatever you say to us we will do, and wherever you send us we will go.

1:17 As we gave attention to Moses in all things, so we will give attention to you: and may the Lord your God be with you as he was with Moses.

1:18 Whoever goes against your orders, and does not give attention to all your words, will be put to death: only take heart and be strong.

A Visit to Luther Burbank by Hugo de Vries *Popular Science Monthly* Volume 67 August 1905

A VISIT TO LUTHER BURBANK.[1]

By Professor HUGO DE VRIES,
UNIVERSITY OF AMSTERDAM, HOLLAND.

FOR many years I had wished to make a study of fruit culture in California and especially of the production of new varieties. One reason which, more than others, made me decide to accept an invitation to visit California was the prospect of making the personal acquaintance of Luther Burbank.

Burbank is the man who creates all the novelties in horticulture, a work which every one can not do. It requires a great genius and an almost incredible capacity for work, together with a complete devotion to the purpose in view, to accomplish such results. Burbank possesses all these qualifications, and his previous achievements have excelled all expectations to such an extent that it is rightly presumed that no possible improvements are beyond his reach. In fact, the most impossible things are attributed to him, and the credulous American people expect from him novelties which any person who knows would immediately declare to be nonsense. I once had a conversation, in a Pullman car, with a lady and a gentleman who told me all kinds of interesting stories about plants and fruits, about climate and places and many other things. They knew, of course, Burbank. Every American does, who pretends to know anything about fruits. They told me all about the large and juicy plums, the new pears, the beautiful flowers, and a number of other creations of his. But by far the best and most delicious fruit, entirely new in form, color and flavor, was, they said, a hybrid between a raspberry and a mulberry! Over this mystic novelty her enthusiasm was inexhaustible!

As soon as I had decided about my plans I wrote to Burbank and told him my desire. I had previously been in correspondence with him, and a few years ago I had hoped to meet him at the Congress of Hybridologists in London, but his arduous labors prevented him from being present. I feared even now that there would not be many chances of speaking to him, because July is his busiest time, when all the numberless crossings are made and the selection of prunes takes place. These fruits at the present time are represented by a larger number of varieties than any other plant in his orchards. It is no small matter to select the best plum out of 300,000 different varieties. This requires not only talent and experience, but also a great deal of time, and it all has to be done within a few weeks while the prunes are ripe on the trees.

My wish to see him was, however, met with the greatest cordiality. Others had naturally the same desire, and we were consequently all invited to come together to Santa Rosa, where Burbank lives, and

to inspect, under his personal guidance, his experimental plots. He set apart an evening and a whole day for our visit. How many crossings and selections he had to sacrifice for this I do not know. Our party was a rather large one. There was first Professor Svante Arrhenius — the man who with van't Hoff laid the foundation of modern physical chemistry. Among all the savants I ever had the fortune to meet, he certainly is the man with the widest knowledge and the broadest interests, and his opinion about Burbank's methods was of the greatest value to all of us. In our party was also the physiologist, Jacques Loeb, the discoverer of many important phenomena in regard to fertilization in lower animals. His studies have led him to the question of the causes of life and of those life-functions which give animals and plants their characteristics, expressed in the differences of kinds and varieties. These characteristics can not be studied to advantage except by means of hybridizing. So far no one in the whole world has made crossings on a larger scale than Burbank, and it was only natural that there should be many points in common between the studies of both these men. Our party was under the guidance of Professors Wickson and Osterhout, of the University of California. Both are personal friends of Burbank and, notwithstanding the distance, often visit him to keep posted on the progress of his work.

Americans, and especially Californians, feel a great deal of pride in their Burbank. He is a very modest man; he does not work for fame, or for honor, or for the acquisition of wealth. He has none of the aspirations of a merchant. He loves his plants, and is enthusiastic over his work and plans. To accomplish something great for his country is his ideal. For his personal self he is satisfied if his work furnishes him a living and enough to carry on his experiments.

In outward appearance Burbank is a very plain man, more a gardener than a savant, with clear blue sparkling eyes, full of life and fun, appreciating humor in others, telling us stories that kept us constantly laughing. He lives in a small house with his mother and sister, and has but one servant on the place, as he does most of the work personally. The walls of his room are covered with small photographs of his victories, and during our visit these pictures were taken down and demonstrated to us.

As a matter of course prunes interest him more than anything else. Of the hundreds of thousands, which he got by crossing, a few are already in the market. To give an idea of the interest connected with such a new kind I may only name the Waynard plum. This is a delicious, big and round, dark blue fruit with a taste that makes one think of a peach. One seedling of this tree, the selection from hundreds of thousands, he sold to a company, formed especially for the purpose of multiplying and introducing it into the market. This company was not to raise crops from it and to sell the fruit, but to produce grafts and as many plants as were required to introduce it into those states of North America where it will thrive, to make it one of the most commonly cultivated trees in the United States and thereby to add millions upon millions of dollars to the annual production of the country. How much Burbank realized for this one seedling he did not mention to us, but it was certainly enough to compensate for his entire plum-culture of many years.

Such are Burbank's ideals. For himself it is sufficient to receive the cost of producing his creations. He has no children, and does not feel the necessity of accumulating money. The sole aim of all his labors is to make plants that will add to the general welfare of his fellow beings. Therefore he looks in his selecting for other qualities than those upon which we, in Europe, generally lay stress. 'Shipping qualities,' that is the ability to withstand handling in packing and shipping by railroads or vessels, are most important to him. Next comes the property that makes it possible to cultivate them in regions which previously have been unsuitable for this purpose. To produce varieties which combine with great productivity a sufficient degree of frost resistance is one of the chief aims of Burbank.

As an example of this, he spoke of his crossings with the Beach plum (*Prunus maritima*). Here and there along the coast, especially in the eastern states of North America, this shrub grows wild. It is satisfied with almost any conditions. The most infertile sandy soil is just as good as the richest loam; the driest place as agreeable as the temporarily inundated ground. On the eastern coast it thrives equally well in the north and in the south, being nowhere affected by the climate. It never suffers from frost, and always forms a dense shrub, often to the exclusion of all other tree-growth. In addition to all these qualities it is immensely prolific. It does not, of course, produce any edible plums; the fruit is of the size of a small cherry, with a large seed and a very thin layer of fruit-flesh. Late in the season the branches are bent down under the weight of the fruits, which cover the branches in great profusion. This plum has, further, a great number of varieties, with all kinds of forms and colors, some ripening in July and August, others as late as September or October. Even in taste there are differences. Although the fruit is uneatable, it is possible to judge about its flavor.

In many parts of California water is very scarce, but still the soil is fertile. In such regions the population is scanty and remains so, limited by the available water supply, in spite of the perfect climate and the fertility of the soil. Some kind of fruit tree that by means of long roots is able to get water from the deeper strata would be a blessing to such regions. Wealth and prosperity would increase and a large population could exist where lack of water now prevents cultivation. Burbank thinks he will be able to produce such a fruit tree by combining the deep-rooting tendency of the beach plum with the delicious flavor and richness of our common plums. He brought to his place all kinds of beach plum in order to cross them with other species. His aim will not be accomplished by one crossing. Connecting links are required, and therefore the North American beach plum has to be crossed with other American and Japanese plums (*Prunus triflora* and *P. Americana*), and each of these hybrids with four or five kinds of the common plum. Finally a series of hybrids is developed from which almost anything can be expected.

It is natural that by such crossing we must expect the appearance of undesirable characters as well as desirable ones. Some plants produce only good, others only bad, characters, but the greater part exhibit some good points in connection with a larger or smaller number of undesirable qualities. From hundreds of thousands only those must be selected which possess all the desired characters. To make this possible it is necessary not only to cross six or eight kinds with one another, but to use as many sub-species and varieties as possible for the experiments. This work necessitates hundreds and even thousands of experiments. The result of each crossing can only be judged by the fruit, and this indicates new combinations. It can easily be seen what an immense amount of work, patience and capacity of judgment and choice is required to reach the ultimate aim. Yet Burbank told us on that remarkable evening of many such instances. He was enthusiastic in his hope to be able to realize all this during his life.

The making of hybrids from the different species of plums naturally brought us to a subject which, for me, was of the greatest importance from a scientific standpoint. As Arrhenius and Loeb also felt more interest in the theoretical side of these problems, I took the first opportunity to bring the conversation to that point.

I had in mind the 'pitless prune.' Just imagine this, reader! Next day Burbank took us to a plum tree heavily loaded with clear blue, very attractive, yet small plums. He picked a few and asked us to bite right through the middle of the fruit. We did as requested, and although we knew there was no stone in the plum, we experienced a feeling of wonder and astonishment. Inside the plum was a seed, like an almond in its shell, and with the taste of an almond, but without the stony covering. When cutting through the fruit, we found the seed surrounded by the green fruit-flesh, the innermost part of which

was a jelly-like mass, in which could yet be seen some remnants of hard little stones, that scarcely offered any resistance to the knife. Burbank declared, however, that he was not at all satisfied with the result, and said that he had already young trees with fruits, in which nothing could be detected of the stone.

Osterhout told us about the impression this plum made on Professor Bailey, professor of agriculture at Cornell University. He came unprepared before this tree, and Burbank, always full of humor, thought it a good opportunity to play a little trick. Bailey had declared that a stoneless plum was entirely an impossibility, something that was outside of one human lifetime; he refused to believe the statement and could not be induced to risk his teeth on the experiment. To the great amusement of Burbank and Osterhout, he took a knife from his pocket, commenced to peel the plum and to cut away the fleshy part, in order to expose the stone, which he was sure would be there. How great was his astonishment when he finally did not find anything but the naked eatable kernel!

A couple of years ago when I read in one of Burbank's price lists about a stoneless plum, I shared a similar astonishment. How was it possible to bring about such a great change? Hybrids do not present, as a rule, any new simple qualities, only new combinations of already existing properties. The evident properties are often developed from more than one factor, and such composite characters may thus appear, without any new essential factors having been present. This is a fundamental principle in crossing, whether it is done for scientific or for practical purposes. But although the elimination of the stone is only a loss and not a gain of a character, such a loss is just as much outside the sphere of hybrid making.

My astonishment was, therefore, as great as that of Bailey, and I had long ago made up my mind to ask Burbank, if I ever had the opportunity, what secret method or what happy coincidence had enabled him to effect such a fundamental change in a plant. I put my question to him that evening, convinced that on the answer depended largely the scientific value of our visit. And for the second time I was surprised over the unexpected and simple reply: "About two centuries ago they knew in France a 'prune sans noyau' and I bought the fruit and raised a plant in order to cross it with others of my prunes." Thus there is no exception to the rule, there has been no real production of a new character, but we have only had a case of the general American principle: 'try everything.' Over the whole world Burbank looks for different kinds and varieties of prunes, no matter how insignificant they may be, however wild and uneatable, as long as they possess only one or another characteristic, which, in combination with the common kinds, may bring out a new variety of greater value.

To Professor Loeb and myself this was, to a certain degree, a disappointment. We had expected to learn a great deal about this point, the fundamental idea, if not the ultimate aim, of the studies of both of us—that is, the question of the nature and origin of new characters. We now surmised that Burbank's experience did not throw any light on this question.

I had before experienced a similar disappointment. About twenty years ago I was occupied with experiments on hybridization for horticultural purposes. I had already found at that time the general principle that only combinations, but no primary characteristics, were produced. Only in one instance I encountered what seemed to be an absolute exception to this rule. It was an announcement of Lemoine of Nancy, the most celebrated breeder of garden novelties in France. He claimed that he had been able to produce by crossing double lilacs. Double flowers remain longer on the branches than the single, which usually drop off after a few days. To find out how it was possible to develop by crossing from single lilacs new varieties with entirely new characteristics I visited Lemoine in Nancy. Walking through his gardens. I put the question to him and received the following answer:

"That is very simple. As a boy I had seen in the garden of an old relative a specimen of *Syringa azurca*, a very rare lilac of an ancient type with double flowers. Remembering this, I bought that tree from the person who owned my relative's home. With this tree I crossed all varieties of single lilacs I had and got the double variety." Here we find again the same procedure: first buying, then crossing, later grafting or budding on other forms, but no creation of an absolutely new character. The number of combinations may be unlimited, yet the creation of new prime characters is entirely excluded.

This principle came into full evidence while we were in Burbank's grounds. He demonstrated to us 'white blackberries' with large fruit of a delicious flavor, which now are an article of commerce. I asked him about the origin of this crossing. Burbank explained that here and there in California occurred a wild blackberry with white fruit. He had crossed this plant with other forms. A white variety of the common raspberry has similarly been known in Europe since olden times.

Another striking example is furnished by the spineless cactus, one of the novelties of which Burbank expects much. It is one of the *Opuntias*, a desert plant, the fruit of which is eaten and known as Indian figs. Its stem consists of big, flat slabs, joined together in the most fantastic manner. It reaches a height of six feet, spreading widely and growing luxuriantly. The fruit is much relished by cattle, as it is juicy, rich in foodstuff and has but few thorns. The whole plant is eaten by animals only when they are driven to do so by hunger, as it is covered with hard prickly thorns. If the plant is cooked for some time the thorns soften and the cactus becomes a nutritious food. This process of cooking is, however, too expensive for practical purposes, and hence a cactus without thorns would transform a barren desert into rich pastures. To reach this Burbank brought together wild *Opuntias* from Mexico, South Africa and various other countries as well as the commonly cultivated species. Among the specimens Burbank received, one was accidentally found without prickles on the leaves and another with no thorns on the young shoots. It was, therefore, necessary to combine in one plant both these negative characteristics, something that experience has shown can be done. However easily this is explained, still it elicits astonishment and wonder to see a cactus without spines. All that is now left to be done is the crossing with forms known as the most nutritious, and at the same time to watch the development of other characteristics, especially the root system. It will not take many years for Burbank's cactus to transform large stretches of desert into fertile fields even without irrigation.

Along the road in front of Burbank's house is a long row of high trees with wide spreading crowns and dark foliage. These are Burbank's first hybrids, walnuts, that are a combination of the eatable nut and an ornamental tree of the same genus (*Juglans regia nigra*). From seeds of this hybrid Burbank raised a few rows of seedlings which show a surprising variety in growth and leaves. These latter are all lanceolate, sometimes with broad leaflets, sometimes with narrow, some are petiolate, others sessile on the branchlets, now coarse and then fine, frequently reminding one of the common English walnut, and again approaching the ancestor, the black walnut. We saw some of the variety of forms resulting from crossing, and from these the best have to be selected for certain purposes.

Burbank's entire garden contains only two and a half acres, while the experiment farm near Sebastopol, about one hour's drive from Santa Rosa, comprises twenty acres. Two days each week Burbank spends on the farm, riding there on his bicycle; the rest of the week he is at home. Here are all the more delicate crossings, and it is here every new experiment is started. It is only when certain definite results are in view and when the cultivation of thousands of specimens is required that they are raised on the farm near Sebastopol.

He showed us a bed of wild flowers in his garden. He collects these in the vicinity, transplants them,

selects and crosses the various forms as soon as they promise anything of advantage. Others he crosses with cultivated species of sufficient relationship. His idea in doing this is to make a large number of garden plants, which will be so fertile, and consequently so cheap as to come within the reach of any one. Briefly, he wants to spread over every garden spot in California a still richer treasure of flowers than it already possesses. Thus, for instance, he has crossed the large and deliciously night-scented *Nicotiana affinis* with the wild, tree-like *Nicotiana glauca*, which can not be called an ornamental plant on account of its greenish flowers, but by flowering profusely and by having such large bunches of flowers, it offers an excellent object for hybridization. We noticed several kinds of Cape gooseberries (*Physalis*), of the blood-red *Heucheras* and others already hybridized. The common garden poppy (*Papaver somniferum*) he had crossed with the large flowered, brilliant orange-red, perennial poppy, and a great number of hybrids were now growing. These were almost all sterile. Some of them terminated in a dried-up stub without flowers, others had a minute rudiment of fruit, others only remnants of calyx and corolla. There were all stages up to normal flowers, and seed capsules in which the not yet fully developed seeds could be seen through a lens.

After crossing all kinds of color varieties of the common poppy he got one with a light blue color. Although the color is not very pretty, yet this plant is very interesting, as blue poppies have been hitherto unknown. Probably the change in color is caused by the combination of pigments in some flowers and the chemical constituents of cells of others. This is, however, only a supposition.[2]

Many other wild plants, as *Brodiaeas*, *Erysimums* and *Cephaloptrum Drummondi*, he had hybridized, getting flowers which first came out carmine red, but then slowly changed to white, a very unusual mode of variation. In order to reduce the price of *Amaryllis* and *Gladiolus* to a few cents, and thus make these beautiful red and white-striped flowers common in every garden, he devoted attention to the increase of side-bulbs. He had already plants with twenty to twenty-four bulbs instead of the old forms with hardly any or but a few side-bulbs. Burbank has his own peculiar ideas about the power of nature and natural phenomena, which play such an important part in his work. His principal theory is that 'heredity is the sum of all past environments'. This he repeated time and again in his explanations. Crossing brings together in one individual the sum total of the environmental influences to which the two lines of parents have been subjected, and hence increases its variability.

Among the remarkable results of Burbank's work which we saw at the Sebastopol farm were a couple of trees of Loquat (*Eryobotrya japonica*) about six feet high, but with spreading fruit-laden branches. One of these trees was the original Japanese kind with small yellow fruit, the size of a cherry, of acid taste and almost filled with the large seed. It has a peculiar flavor, found in no other fruit. This aroma was also found in the fruits of the other tree, but these were larger than walnuts and had an orange-red color. The seed was not larger than that of the wild tree, but the juicy fruit-flesh was greatly developed in thickness and very delicious. This improvement of the loquat, which fruit makes one of the finest delicacies for the table, was accomplished by Burbank without crossing, by selection only. This is the same process by which, since the time of the celebrated Belgian horticulturist, Van Mons, our large and juicy apples and pears have been produced, that is, by sowing the seed on a large scale and then continuing the selection for one or more generations. About one half of Burbank's grounds was taken up by prunes. He has at present about three hundred thousand different kinds. The number of trees is not so great, however, as he grafts his seedlings on other trees, when they are two or three years old and show some promise for the future. For this purpose he uses the whole seedling, throwing away the roots. We saw small trees with from thirty to forty grafts, and large ones upon which two hundred to four hundred branches were grafted. When the foliage is of different color and form and the branches bear plums, red, yellow or blue, flat or round, small or large, some ripe and others only half developed, the result is strikingly bizarre. When the fruit is ripe he walks along the rows, marking those which are

undoubtedly the best, as far as can be judged by a cursory examination. Then a workingman removes all those which for one reason or another are considered valueless. By this method only about half of his original stock is left, and this then receives his careful investigation. Possessed of an inborn talent, he is able to select in a few summers four or five of the best kinds among the hundreds of thousands on his grounds. These are then multiplied, while all the others are destroyed and replaced on the mother trees by the next series of seedlings. These are often somewhat assorted even before transplanting from the shallow boxes where they have been grown. Sometimes the color of the leaves indicates the value of a tree, as in crossings between the common cherries and prunes with *Prunus Pissardi*, which, on account of its brown foliage, often is cultivated as an ornamental tree. In other cases the size of the leaf is an indication of certain properties of the fruit, Burbank's long experience enabling him to see some correlation between leaf and fruit. Thus he can with some certainty discard a number of trees before transplanting, which naturally saves time and room.

One of Burbank's favorites is a large 'Marguerite,' which he calls the 'Shasta Daisy,' after the great California mountain of that name. It is one of his improvements of a perennial daisy which grows wild in Shasta county, and is very variable. By crossing and selecting, it has been developed into a plant that excels by its rapid growth and its profusion of extremely large beautiful flowers, which for months cover the ground. These and other characteristics will make the Shasta daisy one of the commonest and cheapest, still one of the most beautiful, of garden plants.

What makes Burbank's work entirely different from that of other plant breeders is the immense scale on which his selecting is made. He is, therefore, able to make greater improvements than others and in much shorter time. In his work Burbank is guided by a special gift of judgment, in which he excels all his contemporaries. The best proof of this is to be found in the great success his creations have made, not only in North America, but also in Europe.

His methods of work are the same as those followed by plant breeders in Europe. Secrets he has none, and if he is not willing to demonstrate his cultures to everybody, this must be attributed to the fact that his time is too valuable. There is no fear that any one could 'steal his trade' by merely looking at it. Every one is left free to follow in his path, but without the special disposition for it nobody will succeed, and for simple imitation the entire process is too complicated.

To give an idea of the immensity of his cultures, it is sufficient to cite one instance. When selecting a new kind of blackberry he picked out the best from 60,000 specimens, all in full bearing, dug up the rest and burned them. This is his way of working, not only with one kind of fruit or flower, but with all. The most remarkable trait, however, of his work is that he experiments with as many forms as possible. This method is carried to the highest degree of perfection, and thereby his results are so stupendous that they receive the admiration of the whole world.

However large may be the number of forms subjected to crossing and selecting, this method is in itself limited. Burbank's products are all, with a few exceptions, reproduced not from seed, but by vegetative propagation. Grafts or cuttings, bulbs, shoots or division of roots are the means of multiplication. It is well known that vegetative propagation results in much greater stability than raising from seeds, which often produces degenerate types. Because of this fact, Burbank hardly ever experiments on annual or biennial plants, but confines himself to perennials.

In Burbank's methods selection plays the most important part. To accomplish a good selection, however, the greatest possible degree of variation is a prerequisite. This variation is attained mainly through selection of the starting points and through artificial hybridization. The results are next

cultivated on a large scale under environmental conditions which will develop as many differences as possible.

Varieties coming from separate localities differ not only in regard to external characteristics, but their capacity of modification varies considerably, and can often be ascertained only in the special environments of an experimental garden. The greater this power of adaptation the more chances for the experimenter.

As a general rule, it holds true that the results of crossing depend primarily on the selection of varieties used for that purpose. These indicate, so to say, the program, the list of possibilities from which the choice and the combinations have later to be made. Outside of this list very little good is obtained, and then only by accident. This occurs very seldom in Burbank's cultures.

When he wishes to experiment with wild flowers Burbank goes out himself in search of specimens. He carefully compares the different places of growth and investigates the variation in individuals. Many days are thus employed in gathering together one kind in order to find out existing dissimilarities or to see whether they promise anything for future cultivation. Such specimens are then transferred to his experimental grounds, and when established are subjected to crossing.

With crossing or hybridization we usually understand the sexual union of two individuals belonging to different species or varieties. In practical plant breeding, however, it is not sufficient to combine two types, but three, four, and even five or six kinds are thus united, so as to bring out as many desirable qualities as possible in one single variety. It is, of course, impossible to predict what result will be obtained, and it must be left to chance and the future to decide what combinations are the most desirable. Often crossings are made only with the object in view that among all the combinations something good may turn up. In this case the breeder wants to destroy the equilibrium of existing characters, to make the constant forms unstable, and then to select the best out of the many balancing properties. When the parents themselves are variable their offspring will naturally be more so, and the number of differences increases with the number of hybrids experimented upon.

There is also a chance that latent or sleeping characters may be brought to light. From a scientific point of view we know, as yet, nothing about this, but Burbank holds the opinion that in many cases one character prevents another from becoming visible. For instance, in crossing, the first one meets an opponent which has kept it back—as is often the case in the crossing of varieties—and this latent character gets an opportunity of becoming active. We can naturally not detect what dormant qualities are hidden in a plant, and may, therefore, expect all kinds of surprises. The combinations may be desirable, and the hybrids can be propagated immediately, or they may be the reverse and need further crossing before the unfavorable traits are eliminated. Unknown atavistic properties may in this way become evident and may play an important part in the development of future generations.

In other cases the crossings are made with a certain purpose in view. These are the instances from which we learn the most, and which at the same time give the best chances for quick and favorable, results. A certain number is selected of species or varieties, which together contain those characters we want combined in one type; the undesirable properties we try to eliminate. As the crossings result in all kinds of combinations, it is necessary to produce them in as large numbers as possible, so that among the numberless undesirable and imperfect plants we may choose the best. The chances are that from the five or six desired good characters only three or four are found together. Thousands of seedlings have to be developed in order to create a possibility of finding one form in which the expected qualities are present. It is a game of solitaire on a large scale. I may mention as an example of this the production of

the Alhambra plum, which was obtained by combining European, American and Japanese kinds. It took thirteen years to combine all these. First came the crossing of the Kelsey with the *Prunus* Pissardi. Their hybrid was crossed with French prunes. In the meantime various other crossings were created, and it was made possible to work the pollen of these 'into the strain' as the term is called. First came Simoni \times triflora, and then Americana \times nigra. This sevenfold combination gave us the variety now known in the market as the Alhambra.

We can go still further and cross species that are yet more widely separated. It is then naturally even more difficult to predict the results. Burbank endeavored to combine the plum and the apricot and succeeded in getting a new fruit, which he calls plumcot, of very delicious taste and looking very much like an apricot, but combining the soft skin of this fruit with the dark color of the plum. Burbank had a number of varieties of this new fruit, some with a yellow fruit-flesh, others of dark red color, light rose or white. In taste these plumcots differ considerably.

Burbank is equally successful in hybridizing flowers. In the instance of the Callas—well known through the many varieties of *Richardia aethiopica*—all the new cultivated forms have been hybrids of a few species. Burbank, however, crossed *Calla hastata*, the yellow 'Pride of Congo' *C. Elliottiana* with dark yellow flowers and spotted leaves, *C. Pentlandi*, also yellow with dark purple spots, the rose-colored *C. Rehmanni*, and the small light yellow *C. Nelsoni*. From all these he received a great number of different hybrids, among which were found the most varying shades of color, very large-sized as well as dwarfish forms. The colors were not limited to spadix and spathe, but spread over peduncles and petioles, and even the leaves were variegated with spots and stripes. In addition to these peculiar colors and forms the hybrid Callas, of which Burbank had long rows in bloom at the time of our visit, possess a hardiness and adaptability to extreme temperatures, which fit them for outdoor cultivation, where formerly Callas could be forced to full development only in hothouses. Every year these hybrids are again subjected to the process of crossing, and each year new and often unexpected forms appear. How far this will go it is at present impossible to predict.

Because of the favorable climatic conditions under which Burbank conducts his experiments, he is able to work on a much greater scale than is possible in Europe. While we can only select from a few hundred of seedlings, Burbank can get tens of thousands into blossom. In this way the number of years necessary to bring about improvements can be considerably reduced. It required in Europe more than half a century to produce the beautiful *Amaryllis* forms, which we admire so much. Burbank has got wonderful results in much shorter time. In the process of selecting he preferred those forms which required the shortest time to come into blossoms, and by following up this method he succeeded in greatly shortening the duration of life from seed to seed, as it is called. It is evident what this means. Instead of having to wait four or five years after a crossing, before the result could be judged by the flowers, Burbank can make his selection in half the time. This, of course, not only includes saving of time, but also reduces the size of the cultures, and consequently the expenses. Burbank's aim is to make *Amaryllis* one of the most common ornamental garden plants, which will find its place in parks and private residences, in city gardens as well as near the farmer's humble dwelling. In order to introduce new forms into the stock of *Amaryllis*, Burbank endeavored to cross them with the related *Crinums*, and, from what we saw, his first trial was crowned with success. From the Florida swamps he obtained a wild *Crinum Americanum*, which has proved its fitness for crossing, and at the same time he had in his hothouse varieties from tropical regions, which he was going to cross with more hardy forms, so that they would feel at home in the California climate.

Among all the above mentioned points upon which I desired to draw special attention is the shortening of life from seed to seed. As the experiments, with a few exceptions, are conducted on perennials, and

as vegetative propagation only is resorted to for multiplication, it would in many cases necessarily take several years before the plants flowered. Where repeated crossings have to be made this would cause considerable difficulty.

The means which make it possible to shorten the vegetative period are three: first, the splendid climate of California; second, the selection of the earliest flowering seedlings, and, finally, the method of grafting. Experience has taught us that the best way of forcing the stem or branches of seedlings to an early development is by grafting them on older trees. On a good-sized plum tree may be grafted, as said before, hundreds of seedlings. They will bloom in a couple of years, and as soon as they bear fruit selections can be made. The inferior grafts are then removed, so as to allow room for the good ones to develop more rapidly.

In the process of artificial crossing the greatest possible precautions have to be taken in the application of pollen. Yet the method is as simple as possible, because the hybridization is carried on on such a large scale. First the stamens of the flowers to be crossed have to be removed. This is usually done while the flower is in bud and the stamens close together. One circular cut only is sufficient. Care must, of course, be exercised so as not to hurt the pistil. Next protection against insects has to be provided for, as otherwise pollen might be transferred from other flowers and the expected results spoiled. In scientific experiments a great deal of attention is paid to this, and the flowers are carefully enclosed in cases of metal gauze or in especially prepared paper bags, so that no insects can reach them. In practical plant breeding this would, however, be too cumbersome. By the circular cut mentioned not only are the stamens cut through, but the corolla is also removed, and the flowers are consequently not so conspicuous and do not attract the insects, except where there is fragrance. The majority of Burbank's improved fruit trees belong to the first category. In practical work the visit of a single insect is not so much feared, because all the mischief it may do in bringing the pollen is to produce a valueless hybrid. This can later be destroyed. Besides, the insect may come too late to bring about any result. But there is also a possibility that a new and good hybrid may be produced. The application of any cover is, therefore, entirely out of the question. This is the reason why unexpected results of such practical work are never entirely free from the suspicion that they are due to accidental introduction of pollen. Such results, therefore, do not enable one to draw reliable scientific conclusions.

Burbank's method is to collect the pollen required for these crossings on watch-glasses, as it keeps fresh for about a week. With these glasses he goes to the plants he wants to pollinate and applies with his finger tip a little of the pollen on the stigma. This is, as a rule, not yet ripe, but the pollen adheres to it until it matures. Fecundation thus begins at the time the stigma becomes glutinous, which lessens the possibility of other pollen being introduced.

I wish now to consider one of the most remarkable features of Burbank's work, the immense scale upon which it is conducted. This is the best plan for obtaining the most variations in a short time. He starts thousands of seedlings for each hybrid, and when the culture admits and the interest requires it, this number is increased to 50,000 or 60,000. In order to give an idea of the significance of these figures and of the work they imply, Burbank shows in one of his catalogues an autodafé of hybrid raspberries and blackberries. For the purpose of getting a hybrid with larger berries and bigger bunches he cultivated 65,000 seedlings until they blossomed and were in full bearing. A few dozens were selected, and the balance, heavily loaded with fruit, were dug up and gathered in a pile, which was then reduced to ashes. And this goes on every year; fourteen or fifteen such bonfires a year are not uncommon. One consisting of 10,000 to 15,000 roses, luxuriantly flowering seedlings, annihilated the work of a number of years after the selection of only three good varieties. Half a million lily bulbs were entirely destroyed after fifty of the best had been separated for further cultivation. And so I could cite a number of

instances.

It is evident that the chance of finding something good is much greater if the selection can be made from hundreds of thousands instead of from a few hundred only. Those who wish to compete with Burbank will have to accept this principle, and if this can not be done, they had better follow a different method and select species that admit the use of different methods.

It is theoretically of great interest to compare Burbank's principle with the methods of selecting generally in vogue in Europe. There the work is not performed on such a large scale. Preference is given to repeated selections, and the idea is prevalent that the desired results can be reached only by following the regular road. The question is whether by such repeated selection we proceed faster than by a single sowing on a larger scale. "We can easily calculate the proportion, and it can be said that with five years' work a hundred times smaller number of plants have to be cultivated. This would, of course, lessen the expenses in proportion, but there is always the disadvantage of the result being available so much later.

When novelties are wanted in varieties of Begonias, Geraniums, Dahlias or Fuchsias, for instance, which annually produce many new forms, the hastening process would be of no value, but in new genera unexpected results are often attained, and in that case the hastening method will amply repay the expense. Yet these questions are the secrets of breeders. Of scientific importance is the question whether repeated selections are alone sufficient to bring about the same end, and further if by this means more variations are produced.

We have no facts which would decide this, and I would not have brought up the question, had it not been for its great influence on the study of evolution. It is closely connected with the question whether species slowly merge into one another or whether they originate by mutations. In the former case small deviations would increase in the course of generations, and thus a long series of intermediate forms would connect the new and the old species. In the latter case a jump is made without any intermediate stages. So long as there were not sufficient instances of this mode of change, and so long as we had to rely upon cultivated varieties only as proof, the first proposition was naturally the most probable. It rested on experience in agriculture and horticulture in regard to improvements of races, and it was believed that species in nature originated in the same manner. The result of breeding on such a large scale as that mentioned above was at the time unknown, and it was believed that the results could be obtained only by repeated selections. If by experiments on a large scale the varieties could be produced at once, the former view would evidently lose much of its value.

The magnitude of Burbank's work excels anything that was ever done before, even by large firms in the course of generations. The number of fruits and flowers which he has improved is unequalled. Others confine themselves to one or two genera; he takes hold of everything. The majority of breeders who became famous by their improvements of certain groups took up this work merely as an adjunct, as a means of widening their commercial relations, thus creating a greater demand for their nursery products. Burbank commenced in the same way, but as soon as he had obtained what he thought he required, the nursery business was abandoned, and he devoted himself exclusively to the improvement of flowers and fruit. It is to this resolution he owes his present fame.

Another point of importance which is also evident from Burbank's work is that in many genera the development of hybrids seems to have reached its limit. In some cases neither Burbank nor any other breeder could produce something new. Apples, pears, peaches, strawberries and a few other types are quite exhausted. The circumference of their form-circle, if I may be allowed to express myself this way,

or, as Americans say, their possibilities, are already taken up in cultivation. Inside that circle, of course, improvements are possible, and every one who eats canned apples, or pears, or peaches from California knows that progress in regard to these fruits is evident enough. But Burbank himself considers those species exhausted, and he asks for his improvements no higher rank than what already exists. He has added to them only greater productivity and the qualities required for packing and shipping. It is, however, by just these qualities that a great deal of California's prosperity has been created and the fruit export to Europe increased, qualities which the consumer applauds as much as the European orchardists fear them.

From a scientific point of view Burbank's varieties are but individual, by which I mean that the variety has been produced by one single individual, hence from one seed. That specimen has then been multiplied by vegetative propagation into the thousands, or probably millions, of plants which are in the market. As an individual the variety preserves the characters obtained through hybridizing.

Exceptions to this rule are rare. Burbank has, however, obtained a few hybrids which are stable when raised from seeds. These are naturally crossings of stable species or at least stable hybrids. As an example I may mention the hybrid between the California dewberry and the Siberian raspberry. Both have small and insignificant fruits, while the hybrid on this point greatly surpasses either parent. In Europe we have long known similar instances through the studies of wild hybrids by Kerner, and by Wichura, Janzewsky and many other writers regarding cultivated bastards.

If the relationship between species is not close enough, all attempts to hybridize are frustrated. Either the crossing is a failure, and no seeds are produced, or hybrids are obtained which are infertile. In the case of flowers this is not of so much importance, but in regard to fruit trees such a result is a complete failure. It is evident that nature has here drawn a limit which man can not cross. This boundary line is, however, not marked, and consequently once in a while surprising results are obtained. Hybrids which are infertile in thousands of cases may for once prove a success among hundreds of thousands. Burbank has an example of this in his crossing of Petunia with tobacco. From numberless hybrids he got one germinating from seed. He named this curiosity Nicotunia (from Nicotiana and Petunia). It was not very attractive and succumbed after one year, having flowered profusely, but failed to produce any seed.

It is unfortunate that we can not see this limit of nature in advance, but have to learn it by experience. And this experience includes an almost incomprehensible amount of labor of which no one hears anything.

Authorized translation from the Dutch, by Dr. Pehr Olsson-Seffer, Stanford University. This article was written by Dr. H. de Vries, the eminent botanist and originator of the mutation-theory, while in California last summer. It was originally published in the magazine 'de Gids' in Holland, and forms a part of the third chapter of a book 'Naar Californië' by de Vries, which recently appeared in Amsterdam. It is of considerable interest to note the impressions de Vries, the scientific botanical experimenter, received during his first visit to Luther Burbank, the foremost practical plant-breeder in the world, whose remarkable achievements have created world-wide admiration, and to whom the Carnegie Institution recently granted an annual appropriation to insure the undisturbed continuation of his work for the next ten years.

The original reads: De kleur berust waarschijnlijk op een verbinding van de kleurstof van sommige soorten met de scheikundige inhoudstoffen van de cellen van andere. Maar voorloopig is dit nog slechts een vermoeden.

BRIEVEN UIT EN OVER AMERIKA.

The Project Gutenberg EBook of *Brieven uit en over Amerika*, by
Carel Victor Gerritsen and Aletta Henriette Jacobs

I.

2 Sept. 1904.

De indrukken door mij verkregen van het leven en van het volk in Amerika ga ik melden. Doch vooraf een korte inleiding.

Ik zou voor het eerst Amerika bezoeken; voor het eerst een zeereis van eenige dagen maken. Geen wonder dus dat ik, wetende hoe vatbaar ik ben voor zeeziekte, tegen die reis heb opgezien. Toch is gelukkig gebleken dat deze vrees ongegrond was. De bouw en de inrichting der groote booten op Amerika geven dezen een vastheid die de kans op zeeziekte tot een minimum reduceert, zoodat dan ook bij een tamelijk sterke bries en beweeglijke zee, op de “Potsdam” weinig of geen schatting aan de visschen werd betaald.

Welk oneindig genot biedt dan zulk een zeereis! De pracht der zee met haar onophoudelijke veranderingen van kleur en beweging en haar frissche bries soms afgewisseld door bijna volkomen afwezigheid van wind, behoudens het koeltje dat de 15 mijlen vaart, waarmede het schip zich voortbewoog, veroorzaakte, [7]deed werkelijk niet naar het einde der reis verlangen. Integendeel. Naarmate de dagen heensnelden werd het verlangen naar het einde der reis minder. En dit was niet mijn persoonlijk gevoelen, maar dat van nagenoeg de meesten der eerste klas-reizigers.

Wij waren op een mooi schip: de “Potsdam” van de Holland-Amerika lijn; het personeel van den hoogste tot den laagste in rang, putte zich uit in voorkomendheid en goede zorgen voor de passagiers. En kaptein Stenger was een voorbeeld van opgewektheid en jovialiteit. De tafel was uitmuntend; van den eersten tot den laatsten dag werden wij onthaald op de smakelijkste spijsen en op de fijnste vruchten. De Hollandsche zindelijkheid werd overal betracht. Voeg bij dit alles een prettig gezelschap, dat de dagen deed heenvliegen, en men kan denken welke indruk mij van deze eerste zeereis is bijgebleven.

Aan boord heerschte algemeen een aangename opgewekte geest. Het gros der bijna 200 eerste klas passagiers bestond uit Amerikanen, overigens Hollanders en enkele Duitschers en Franschen—geen Engelschen. Het bleek mij uit de gesprekken met Amerikanen aan boord en later ook hier in Amerika dat de Holland-Amerikalijn, en in ’t bijzonder kapitein Stenger, zich mogen verheugen in eene bijzondere populariteit bij de Amerikanen. Het trof al bijzonder gelukkig dat wij onzen voortreffelijken consul-generaal, den heer Planten, die reeds meer dan 25 jaar op zoo uitnemende [8]wijze de belangen onzer Nederlanders te New-York voorstaat, tot onze mede-passagiers mochten rekenen. Met groote voorkomendheid interesseerde hij zich voor het doel van ieders reis naar de Nieuwe Wereld en van den ochtend tot den avond was hij voor de Nederlanders de welwillende vraagbaak, onvermoeid in het geven van nuttige wenken en inlichtingen.

Met den heer Grevers, van Amsterdam, die als regeerings-vertegenwoordiger het congres van tandheekkundigen te St. Louis ging bijwonen, en den heer Martens, van ’s-Hage, gedelegeerd lid der

Regeringscommissie voor de schoone kunst, die als lid der jury naar St. Louis trok, vormde hij het trio officieele personen dat naast den kapitein van het schip bij de maaltijden aan het hoofd van de tafel was gezeten. Hetzelfde trio dat met den kapitein een verrukkelijken feestavond organiseerde.

Het toeval wilde namelijk dat eenige Hollandsche en Amerikaansche artisten zich bevonden onder de passagiers.

Op uitnoodiging van genoemd comité werden zij bereid bevonden, ten bate van de Zuidhollandsche Maatschappij tot redding van schipbreukelingen, hun talenten ten beste te geven. Verdienstelijk was o.a. een voordracht van den bekenden Amerikaanschen komiek Edwards, maar het meeste applaus, de grootste toejuiching viel Mevr. Coïni-Francisca ten deel, onze bekende zangeres van de Nederlandsche Opera die, [9]van Amerika geboortig, naar haar vaderland terugkeert om daar als solo-zangeres de lauweren en de dollars te oogsten, die haar zoo rechtmatig toekomen.

Te lang is mij de reis, die van Boulogne naar New-York 10 etmalen duurde, niet gevallen, maar voor hen die, om welke reden ook, niet gaarne zoo lang onderweg zijn, en dat zijn verreweg de meesten, duurt zij te lang. Ik heb dat in de laatste dagen bij herhaling gehoord. Ik heb Belgen, Zwitsers en Franschen gesproken, die mij verzekerden met de Holland-Amerika-lijn niet te zijn overgekomen, omdat de booten er te lang over doen.

De Amerikaansche bladen meldden de vorige week met veel ophef de aankomst van de “Kaiser Wilhelm II” der Norddeutsche Lloyd na een reis van Cherbourg naar New-York in 5½ etmaal, dus bijna de helft van den duur der “Potsdam”-reis.

Indien onze wakkere directie te Rotterdam, op den duur bij de populariteit der lijn, ook het drukke passagiers-verkeer wil behouden, zal zij m.i. op middelen bedacht moeten zijn om de “snelvaarders” in den duur van de vaart zoo niet te overtroeven, dan toch minstens nabij te komen.

En daarvoor biedt, als ik mij niet bedrieg, een nieuwe Amerikaansche constructie der stoommachine de gelegenheid. Ik zal mij aan eene beschrijving dezer nieuwe constructie, voor de aanwending van stoom en electriciteit niet wagen, doch alleen vermelden tot [10]welke conclusie een vakblad na de bespreking der “Turbine” kwam. “De electrische generatoren van zeer hooge spanning—zegt bedoeld blad—zijn zoo omvangrijk geworden, dat zij de grens van mogelijke constructie en van beschikbare ruimte nagenoeg bereikt hebben. En toch blijft de vraag naar steeds krachtiger werktuigen aanhouden. Spoed en kracht gaan in deze hand aan hand. De groote regeneratoren werden voortgedreven met den spoed als de monstermachines ze konden drijven. Toen dit punt bereikt was, was men met de geleidelijk zich ontwikkeld hebbende turbine gereed. Met een turbine, die 750 wendingen maakt in de minuut, is het mogelijk van een kleinen electrischen generator eene hoeveelheid electrische energie te verkrijgen, als voorheen slechts van een oneindig veel grootere machine kon verkregen worden.”

Uit hetzelfde blad vernam ik dat hier “turbines” in werking zijn van 6500 paardenkracht, maar voegt het er bij, dit is nog slechts een begin.

Indien het nu waar is dat deze machines minder aan slijtage onderhevig zijn, minder dan de helft van oppervlakte in een schip noodig hebben, en minder aan brandstof kosten, voordeelen die wellicht alleen door de ervaring zijn te constateeren, dan zullen toch zij die er het eerst bij zijn om ze op hun schepen aan te brengen, hun concurrenten het hoofd kunnen bieden en het passagiers-vervoer tot zich trekken.

De “Kaiser Wilhelm II”, waarvan ik hierboven sprak, heeft machines van 40.000 paardenkracht. De Cunard-line laat nu booten bouwen met de nieuwe verticale turbines en zal dan met 60.000 paardenkracht stoomen. Deze zullen de reis dan stellig in nog minder dan 5½ dag doen. En wat zeker het grootste voordeel van deze vinding kan genoemd worden, is de afwezigheid van vibratie, waaraan de tegenwoordige snelvaarders met de oude machineconstructie mank gaan.

Dit alles zal, daarvan ben ik overtuigd, het bestuur der Holland-Amerika-lijn wel weten; maar het Nederlandsche publiek moet het ook weten, opdat het kan nagaan of de reederijen, waarop het terecht trots gaat, wel steeds de voortvarendheid aan den dag leggen, noodig om aan de spits te blijven van het bedrijf dat zij uitoefenen. Indien te eeniger tijd, om redenen buiten het bedrijf gelegen, deze echt Nederlandsche onderneming zou moeten worden opgegeven, laat het dan toch vooral niet zijn, omdat de aartsvaderlijke voorzichtigheid die o zoo gaarne “de kat uit den boom” kijkt, ons achteraan deed komen in den wereld-strijd voor de verkeerswegen op zee. Hier, waar wij de eerste plaats behoorden in te nemen!

En nu de eerste indrukken bij mijn aankomst in New-York. Eerlijk gezegd heeft deze wereldstad op mij niet dien overweldigenden indruk gemaakt als ik er van verwachtte. Zeker, New-York met zijn 3½ [12]millioen inwoners is een ontzaglijk groote stad, waar men zich van boven- en ondergrondsche treinen en electrische trammen heeft te bedienen om zich naar verschillende deelen der stad te begeven, maar dat indrukwekkende verkeer dat men op sommige punten in de City van Londen heeft, ziet men hier niet. Daarbij komt natuurlijk, dat mijne verwachting na het lezen van de opgesmukte verhalen over deze wereldstad, wel wat hoog gespannen was.

Aan de sporadisch opdoemende hooge gebouwen van 20 tot 30 verdiepingen, raakt het oog spoedig gewend. Na eenige dagen moet men er op gewezen worden, of men gaat ze voorbij zonder ze op te merken. En toch, wat huist er niet in zoo’n kollossus! Er zijn hotels met meer dan duizend kamers en in sommige dier steenblokken van de benedenstad—de plaats der business-menschen—worden vier honderd kantoren van verschillende firma’s ondergebracht.

Nu bestaat bij de beoefenaars van hetzelfde of van een aanverwant vak de gewoonte om hun kantoor in elkanders buurt zoo mogelijk in hetzelfde gebouw te huren met het gevolg dat een deel van het personenverkeer, dat anders in de straat zou terecht komen, nu zich afspeelt binnen de muren van het groote gebouw. Wanneer men in zoo’n gebouw gebruik maakt van een der vele liften, dan bemerkt men al dadelijk uit het groote aantal personen dat blootshoofds en in kantoor-jas op alle verdiepingen in en uit de liften [13]vliegt, van hoe groote beteekenis het verkeer in het gebouw zelf is.

Dat die gebouwen hooger zijn dan zij van de straat gezien lijken, bemerkte ik bij een bezoek op ’n kantoor op de 23e verdieping. Ik kwam naar boven met een lift in 3 seconden. Toen, van uit het kantoor, zag men over de huizen en kerktorens heen, over de reuzen-stad zoo ver het oog reikte. Het is verboden zachte steenkolen te stoken, zoodat men in de hoogere sferen, van den rook uit de duizenden schoorsteenen die men onder zich ziet, geen last heeft. Ieder stookt hier anthraciet, dat witte wollige wolkjes uit de schoorsteenen doet stijgen en waarvan men mij verklaarde, volstrekt geen last te hebben.

Behalve van de “elevated” trams—een 10 meter hoog gebouwde electrische tramlijn—wordt hier ook van de gewone electrische tram die door de straten loopt, ontzaglijk veel gebruik gemaakt. Het ondergrondsche systeem is hier ook toegepast. In sommige voorsteden van New-York heeft men ook het Trolly-systeem in gebruik. Het tarief is uniform 5 cents met overstapjes op de zijlijnen (niet voor retour) en de trams loopen zoo menigvuldig, dat niemand er tegen opziet even te wachten als de eerstkomende wagen wat overvol is, hetgeen niet zelden gebeurt. Bij een verkeer als dat te New-York,

blijkt de meest doeltreffende exploitatie wel te zijn, een spoedig op elkander doen volgen der wagens. De menschen willen niet wachten, tenminste niet lang, en het schijnt mij dat [14] in die richting ook de exploitatie te Amsterdam dient te geschieden. Wanneer dan nog een zoo eenvoudig mogelijk tarief, dat weinig controle vereischt, kan worden ingevoerd, dan zullen onze Amsterdammers, als kinderen van hun tijd, evengoed in de trams gelokt worden als dit hier en elders geschiedt.

Wat de bestrating aangaat, die is al evenals bij ons hier en daar goed, maar volstrekt niet boven bedenking. Niettegenstaande New-York over ruime middelen kan beschikken is niettemin de bestrating op sommige plaatsen in deplorabelen toestand. In enkele voornamen straten zelfs vindt men in 't asfaltplaveisel kuilen, zooals ik zeker weet, dat er in de Amsterdamsche bestrating nergens te vinden zijn. En de keien liggen op sommige pleinen in 't midden der stad minstens even hobbelig als bij ons in de buitenwijken. Laat dit mijn collega's van den Raad tot troost dienen, die nu met de behandeling der begroting voor 1905 in de afdeelingen zich onledig houden en de periodiek terugkeerende jeremiaden over de bestrating, ongetwijfeld niet achterwege zullen laten.

Er is mij nog iets opgevallen in de straten, dat er namelijk des avonds talrijke menschenmassa's voor sommige groote hotels staan, die mij bleken gasten van het hotel te zijn. Zij weten met hun avonden geen raad. Het is te vroeg om naar bed te gaan en zoo men niet naar een theater of tingel-tangel gaat, biedt New-York geen andere gelegenheid voor den [15] vreemdeling om z'n avond door te brengen, als de vestibule van het hotel, of, als het daar zooals thans te warm is, den trottoir vóór het hotel.

Voor een groot hotel in Broadway, de voornaamste straat van New-York, wat het verkeer aangaat, waar gewoonlijk handelsreizigers logeeren, stond 's avonds een paar honderd of meer gasten op den trottoir. Men heeft hier niet, zooals in Europa, cafés waar men den avond kan doorbrengen onder het lezen van couranten of illustraties en het gebruik van een glas bier. Een agent van politie, wien ik vroeg waarom al die menschen daar stonden, en die het mij meedeelde, voegde er bij dat hij soms tegen die heeren moest optreden, omdat zij het geregeld verkeer op de straat belemmerden. Het deed mij denken aan onze Kalverstraat bij den Dam op Maandag. Echter met dit verschil, dat men hier niet de trottoirs misbruikt om kringetjes te spuwen met aftreksel van tabak. Hier is in alle openbare plaatsen het spuwen streng verboden. Op de stoombooten, in de treinen, in de trams, in openbare gebouwen, overal wordt er aan herinnerd, dat het spuwen op den vloer strafbaar gesteld is en streng vervolgd wordt. Ik heb dan ook nog niet gezien dat men het deed en ben stellig overtuigd, dat hier de wetgever door een strenge bepaling er niet weinig toe bijgedragen heeft om de Amerikanen, de onhygiënische gewoonte van spuwen, althans in New-York, af te leeren.[16]

Wanneer zal men er bij ons toe komen het spuwen op den vloer in theaters, trams, booten, scholen enz. te verbieden en bij politieverordering strafbaar te stellen? Ligt het niet op den weg onzer gezondheidsraden daartoe het initiatief te nemen?

Ik wil de lezers niet afschrikken van het volgen mijner artikelen, en zal dus hier afbreken met de belofte dat ik zal trachten in een volgend opstel het wat korter te maken.[18]

II.

6 Sept.

Van de Nederlandsche reederijen is het niet de Holland-Amerika-lijn alleen, die door vreemden ondernemingsgeest, speciaal van Amerikanen, tot groote waakzaamheid wordt aangezet. Andere reederijen, waarop wij Nederlanders niet minder trotsch zijn dan op die van de eerstgenoemde lijn,

worden met zware concurrentie bedreigd. Ik bedoel die onzer stoomvaart-lijnen op Ned.-Indië.

De “Northern Pacific Rail Road”, een dier financieel zoo machtige spoorwegmaatschappijen van Amerika, die bergen verzetten ter bereiking van haar doel, heeft Seattle, de gunstig gelegen haven aan den Stillen Oceaan, tot operatieplaats gekozen voor den aanvoer van goederen van Japan. Een paar groote schepen van deze maatschappij zijn of komen binnenkort in de vaart en zullen tot elken prijs de goederen over die lijn vervoeren, ten einde daarmee weer het spoorwegverkeer op de Northern Pacific te voeden. Wat zoo’n concurrentie zeggen wil, weten wij maar al te goed. Desnoods vervoert men, om toch maar te slagen, de goederen gratis en nog bovendien in Amerika tegen verlaagd spoorwegtarief.
[19]

Welke weg zullen nu in de toekomst onze Nederl. Indische producten nemen, voorzoover deze bestemd zijn of gekocht worden voor Amerika?

Ziedaar een zeer ernstige vraag, die onder de oogen moet worden gezien, nu met de stoomvaartlijn van Java op Japan en van daar naar Seattle, die producten wel eens heel wat goedkoper op hun plaats van bestemming zouden kunnen worden gebracht, dan nu geschiedt met de stoomvaartlijnen van Indië naar Europeesche havens en van daar naar Amerika. En voor onze stad heeft deze quaestie nog meer beteekenis, omdat het voornaamste stapelproduct haar wel eens kon ontvallen. Indien toch te eeniger tijd de concurrentie in Amerika er in slaagt, het vervoer der Indische producten over Japan en Seattle te leiden, zal het niet lang duren of onze tabaksmarkt zal, evenals weleer onze rietsuikermarkt, uit Amsterdam verdwijnen. De beteekenis van dit vraagstuk voor ons land, werd door den wakkeren voorzitter van de Nederlandsche Kamer van Koophandel hier te New-York, den heer D. G. Boissevain, ingezien en maatregelen werden door hem genomen om belanghebbenden bij den Nederlandschen handel in staat te stellen, uit eigen waarneming den omvang van het dreigend gevaar te leeren kennen.

Hij trad in overleg met den voorzitter van de “Northern Pacific” spoorwegmaatschappij en wist te bewerken, dat twee wagens (voor 60 personen) beschikbaar [20]gesteld werden om belanghebbenden in Nederland in staat te stellen, kosteloos—wat het vervoer betreft—de reis te doen maken over haar lijn, dwars door Amerika naar den Stillen Oceaan en terug. Door alle bladen in Nederland is dit enkele maanden geleden bekend gemaakt, maar de deelneming van uit Nederland bleek zoo miniem, dat van het royaal aanbod der maatschappij moest worden afgezien.

Ik betreur dit resultaat in hooge mate. Niet alleen om den ijverigen voorzitter der Nederl. Kamer van Koophandel alhier, maar ook om onzen handel in Nederland. Men behoeft hier slechts eenige dagen te hebben rondgezien om te beseffen, met welke energie door het Amerikaansche volk wordt gestreefd naar het commercieele en industriele overwicht in het wereldverkeer. Indien het jonger geslacht in Nederland niet goed maakt wat zijn onmiddellijke voorgangers helaas verzuimden, dat het namelijk de wereld ingaat om nieuwe wegen van het goederenverkeer te leeren kennen en op te sporen, dan staat het te vreezen dat onze natie eerder dan verwacht schijnt te worden, op dit gebied niet meer wordt medegeteld. De Nederl. Kamer van Koophandel alhier, die blijkens haar eerste jaarverslag, zoo gaarne wordt aangezocht om raad en bijstand voor alles wat strekken kan tot grooter deelneming in Nederland aan het goederenverkeer met en in Amerika, die Kamer geve men handen vol werk en drale niet haar tusschenkomst in te roepen.[21]

Is het echter wel goed gezien van onze Regeering, om het waken over deze groote volksbelangen, die zoo voortdurende en zoo groote persoonlijke toewijding eischen, over te laten aan personen, die belangloos zich daarvoor beschikbaar stellen, maar van wie men dan ook niet meer kan vergen, dan wat zij vrijwillig en naar eigen believen wenschen te praesteeren? Het antwoord op die vraag kan m.i. niet

twijfelachtig zijn.

Voor ons land acht ik het onverantwoordelijk, dat men dit op een koopje doet in de hoofdstad van Amerika, waar onze handel, onze nijverheid, onze landbouw en onze scheepvaart zoo groote belangen heeft voor te staan en te bevorderen. De verdienstelijke consul-generaal, waarvan ik in mijn vorig schrijven gewaagde, vervult zijn betrekking reeds jarenlang zonder daarvoor bezoldiging te ontvangen. De consul ontvangt evenmin salaris. Voor een paar ambtenaren wordt een karig bureau-geld vergoed. Is dat nu zooals het behoort, in onzen tijd van aanhoudenden economischen strijd tusschen de volkeren en dan nog wel ter plaatse van het brandpunt van dien strijd?

Het ligt immers voor de hand dat geen geld beter besteed wordt dan dat, uitgegeven voor een staf goed-bezoldigde ambtenaren, op de hoogte van hun taak en rusteloos werkzaam om onze handels-relatiën met Amerika te bevorderen. Richtte men zóó ons consulaat alhier in, dan zou men kunnen eischen, wat nu erkentelijk [22] en met gratie door onze Regeering wordt aanvaard. Wat echter aan onze fierheid noodzakelijkerwijze afbreuk moet doen.

De wijze waarop in Amerika de handels- en nijverheidsbelangen van overheidswege worden behandeld, moge onze regeering waarlijk wel eens tot voorbeeld dienen. Zoo worden o.a. dagelijks door het ministerie van Handel en Arbeid gedrukt en op ruime schaal verspreid, de berichten die van de Consuls uit andere landen inkomen. Aan alle clubs en vereenigingen en groote werkgevers, die er om vragen, worden deze berichten gratis toegezonden, benevens aan de bladen die zich willen verbinden, die berichten geheel of geëxcerpeerd over te nemen.

En men behoeft slechts een blik te werpen op die berichten, om overtuigd te worden van het groote belang dat handels- en nijverheidsondernemingen bij de spoedige kennisneming ervan hebben.

“Statistische gegevens omtrent het goederen-vervoer op Duitsche spoorwegen”; “Aanbesteding van ijzeren bruggen in Mexico”; “Expositie van automobielen te Plymouth”; “Zijde-industrie in Japan”; “Productie van ijzer in Engeland”; “De oogst van citroenen op Sicilië”; “Aanbesteding van stoomkranen te La Rochelle (Frankrijk)”; “Nieuwe wijze van staalfabrikatie in Australië”; “Bouw van een melk-poeder-fabriek in Frankrijk”; “Buizen voor waterleiding gevraagd te Victoria (Britsch Columbia)”; “De namaak van Amerikaansche [23] schoenen in Perzië”; “Meelfabrieken zullen worden opgericht in Abyssinië”; “Automobielen zullen voor de posterij in Denemarken worden aangeschaft”, enz. enz.

Men heeft hier niet maanden lang te wachten op de publicatie dezer officieele berichten en de regeering onthoudt zich ook van een oordeel over hetgeen dadelijk moet worden medegedeeld, en wat wel wachten kan om te worden opgenomen in het jaarverslag. Alles wordt dadelijk in de bekende officieele brochures van ½ à 1 vel druks weergegeven.

Tot de navolgenswaardige sociale maatregelen van Amerika behoort ongetwijfeld het sluiten der kantoren en werkplaatsen des Zaterdags om 12 uur.

De heilzame werking er van ziet men hier, wanneer men 's Zaterdags in de groote menschenstroom, zich laat meevoeren naar goedkoope verblijfplaatsen aan 't water (de baai of de rivier), of naar parken in de onmiddellijke nabijheid van de metropolis. Den werkman en den beambte ziet men dan met het geheele gezin van dien vrijen middag gebruik maken.

Zaterdag l.l. was ik er getuige van, hoe tienduizenden genoten van den prachtigen uitgestreken

dierentuin, vlak bij de stad in een heuvelachtige streek gelegen en voor ieder gratis toegankelijk. Het verbod bij sommige dieren om ze te voeren enz., werd stipt opgevolgd. In druk bezochte gebouwen, b.v. in dat der roofdieren [24]en der apen, was van gedrang geen sprake. Welwillend schoof de een voor den ander wat opzij en als er geen plaats meer was, van waar wat te zien viel, werd geduldig gewacht.

Het drukst was het voor de kooi van een Chimpanseé en Orang Oetan, die elkander daar reeds 3 jaren gezelschap houden en een opgewektheid aan den dag legden, als ik nog nergens anders van die dieren heb gezien. Zij speelden met elkaâr.... net als menschenkinderen!

In alle gebouwen weer het verbod om op den vloer te spuwen en op de veelvuldige banken in het park het verbod om dit op de voetpaden—die van asphalt zijn—te doen.

De prachtige groote dierentuin met park, behoort aan een door de stad New-York gesubsidieerd wordend Zoölogisch Genootschap.

Ik moet hier weer afbreken, ofschoon ik nog zooveel dat mij hier opviel, zou willen vermelden. De physionomie der bevolking, dat mengsel van zoovele natiën en rassen. Het leelijker type der mannen dan van de vrouwen. De dronkenschap. De nachtvinders. De scherpe reuk der paarden-excrementen in de geasphalteerde straten bij deze warmte. De vele Hollandsche namen boven de winkels en op naamplaten der kantoren. De zucht der Amerikanen om zich van Hollandschen oorsprong te noemen. Het prachtige gebouw van “De Equitable” in Broadway met z’n rijke versieringen en z’n eenige, [25]voor een ieder toegankelijke, bibliotheek. De overvolle trams en de galanterie der mannen, ook der arbeiders, om zonder een woord te zeggen te gaan staan om plaats te maken voor een dame. De dagbladen met hun sensatie-berichten. Al die onderwerpen moet ik verder onaangeroerd laten, omdat anders de lezer zijn geduld kon verliezen. En dat wil ik tot elken prijs trachten te voorkomen, nu ik nog zooveel onder zijn aandacht wensch te brengen.

THE COLORED PEOPLE OF CHICAGO

AN INVESTIGATION

MADE FOR

The Juvenile Protective Association

BY

A. P. DRUCKER
SOPHIA BOAZ
A. L. HARRIS
MIRIAM SCHAFFNER

TEXT BY

LOUISE DE KOVEN BOWEN
1913

The Colored People of Chicago

[Sidenote: =Colored People in County Jail=]

In the course of an investigation recently made by the Juvenile Protective Association of Chicago upon the conditions of boys in the County Jail, the Association was much startled by the disproportionate number of colored boys and young men; for although the colored people of Chicago approximate 1/40 of the entire population, 1/8 of the boys and young men and nearly 1/3 of the girls and young women who had been confined in the jail during the year were negroes.

[Sidenote: =Maids in Houses of Prostitution=]

The Association had previously been impressed with the fact that most of the maids employed in houses of prostitution were colored girls and that many employment agencies quite openly sent them there, although they would not take the risk of sending a white girl to a place where, if she was forced into a life of prostitution, the agency would be liable to a charge of pandering.

In an attempt to ascertain the causes which would account for a great amount of delinquency among the colored boys and the public opinion which would so carelessly place the virtue of a colored girl in jeopardy, the Juvenile Protective Association found itself involved in a study of the industrial and social status of the colored people of Chicago.

[Sidenote: =Morality and Environment=]

While the morality of every young person is closely bound up with that of his family and his immediate environment, this is especially true of the sons and daughters of colored families who, because they continually find the door of opportunity shut in their faces, are more easily forced back into their early environment however vicious it may have been. The enterprising young people in immigrant families who have passed through the public schools and are earning good wages, continually succeed in moving their entire households into more prosperous neighborhoods where they gradually lose all trace of their tenement-house experiences. On the contrary, the colored young people,

however ambitious, find it extremely difficult to move their families or even themselves into desirable parts of the city and to make friends in these surroundings.

[Sidenote: =The First Negro in Chicago=]

Because the fate of the young people was thus so inextricably a part of the life of the colored people in Chicago, the investigators found themselves studying the entire history of the negro on the shores of Lake Michigan, following it to the very beginning where it is said the first cabin was built in 1779, by a negro from San Domingo.

Slavery, of course, prevailed in Illinois just as everywhere else in the Northwest Territory, having been introduced during the French occupation and allowed to continue under the English. When, by an act of Congress, in 1787, slavery was forever prohibited "northwest of the Ohio River," this act was so strenuously objected to in the territory of Illinois that it was construed to refer only to the introduction of new slaves, not to the emancipation of those already in slavery. When Illinois became a state in 1818, its compromise constitution forbade perpetual slavery, but allowed indenture for twenty-five years of service.

[Sidenote: =Illinois Liberal in Slave Time=]

Although the state of Illinois was bound by this compromise, the early city of Chicago itself was most liberal to the negro, as the following incident illustrates: In 1842 an industrious and well behaved colored man in Chicago was arrested on the ground of being in the state without a "free certificate." He was taken before a judge who promptly committed him to jail, to be sold at auction if no owner turned up. In the meantime, friends of the colored man printed handbills announcing that "A man will be sold at auction next Monday morning in the jail," and distributed them on Sunday among the church-goers. When the sheriff brought out his "ware" on Monday to auction him off, he faced an angry and scowling audience and when he began his auctioneering, he found that no bids were forthcoming. "What will you bid for a strong man who can do all kinds of work?" he called again and again, but meeting with no response he threatened to take his man back to jail and lock him up. This threat had the desired effect and he received a solitary bid of twenty-five cents from Mr. M. C. Ogden, a prominent man in the early life of Chicago. The purchaser then addressed the colored man in the presence of the crowd and assured him that he was free to go where he pleased.

[Sidenote: =Chicago Police Did Not Aid in Fugitive Slave Law=]

The passing of the fugitive slave law in Congress in 1850, created a great excitement in Chicago when the colored people of the city met in convention and resolved “not to fly to Canada, but to remain and defend themselves.” A few days later the City Council passed a resolution that the city police should not be required to aid in the recovery of slaves.

[Sidenote: =Colored Children Admitted to Public Schools in 1873=]

In 1854 Stephen A. Douglas was hooted off a Chicago platform when he tried to speak for his pro-slavery resolution in the Senate. From that day Chicago took a leading place in the anti-slavery fight, but it was not until 1872 that all laws discriminating against the colored people were taken off the Illinois statute books. In the next year, 1873, the colored children were by statute allowed to attend the public schools of the city.

[Sidenote: =High School Education of No Value=]

Although no separate schools have ever been established in Chicago, it was found that many colored young people become discouraged in regard to a “high school education” because of the tendency of the employers who use colored persons at all in their business to assign them to the most menial labor.

Many a case on record in the Juvenile Protective Association tells the tale of an educated young negro who failed to find employment as a stenographer, bookkeeper, or clerk. One rather pathetic story is of a boy graduated from a technical high school last spring. He was sent with other graduates of his class to a big electric company where, in the presence of all his classmates he was told that “niggers are not wanted here.” The Association has on record another instance where a graduate of a business college was refused a position under similar circumstances. This young man in response to an advertisement went to a large firm to ask for a position as clerk. “We take colored help only as laborers,” he was told by the manager of a firm supposed to be friendly to the negroes.

[Sidenote: =Business Colleges and Industrial Schools Discriminate Against the Colored People=]

All the leading business colleges in Chicago, except one, frankly discriminate against negro students. The one friendly school at present among twelve hundred white students has only two colored students, but its records show as many as thirty colored students in the past. The manager, however, claims that his business has suffered in consequence

of his friendliness to the negro. Even the superintendent of the Illinois Industrial School for Boys at St. Charles complains that it is not worth while to teach trades to the colored boys in his institution because it is so very difficult for a skilled colored man to secure employment.

[Sidenote: =Resulting Reaction Against Education=]

This reaction against education is one of the indirect results of the difficulties which young colored people encounter in their efforts to find work. The investigators considered this difficulty one of the gravest features in the entire situation, affecting alike most disastrously all of the colored people in Chicago.

[Sidenote: =Uncongenial Employment Often Cause of Criminality=]

From the interviews with all the boys in the jail it was clear that the lack of congenial and remunerative employment had been a determining factor in their tendency to criminality, but because the colored boys suffered under an additional handicap and because the opportunities for work are the essentials for all economic progress, the entire investigation had much to do with the basic question of employment.

[Sidenote: =Labor Unions and the Colored Man=]

The colored man believes that the Labor Unions discriminate against him, either openly or secretly; a few of the organizations have a clause in their constitutions stating that whites alone are eligible to membership, but most of them allow the colored man to pay his initiation fee and become a member; they, however, take no pains to secure him a place, and when he finds it difficult to find work because the contractor and his fellow workmen discriminate against him and only gets a job here and there, he is frequently tempted to work with "scabs," and after several fines for this infringement of rules he drops out of the union. The investigators found that this was not the exception, but the rule. Mechanics who are members of the building trades do not complain because they have been refused membership in the unions, but because they are discriminated against when it comes to working in a building, although this discrimination is not extended to the unskilled colored man. Therefore, while many colored mechanics who come to Chicago for work return to the South where there are fewer unions and white men more willingly work with colored men, this return to the South almost never occurs among the unskilled.

[Sidenote: =An Attempt to Compel Admission to Labor Unions=]

The investigators found that a movement was being discussed among the colored people in Chicago to organize unions for colored artisans to act as strike-breakers whenever possible, until the American Federation of Labor asked them to join the white unions. This, of course, is the very worst thing they could possibly do, as the colored people in Chicago have not yet recovered from the animosity excited against them during the stock yards strike when colored men from the South were imported as strike breakers. The colored people themselves believe that their difficulty in finding work is often due to the objection of the employers to treating the colored man with the respect which a skilled mechanic would command. Certainly the colored laborer is continually driven to lower kinds of occupation which are gradually being discarded by the white man.

[Sidenote: =Corporations Usually Refuse Employment=]

Certainly the investigators found that the great corporations, for one reason or another, refused to employ negroes. Department stores, express companies and the public utility companies employ very few colored people. Out of the 3,795 men employed in Chicago by the eight leading express companies, only twenty-one were colored men. Fifteen of these were porters. The investigators found no colored men in Chicago employed as boot and shoe makers, glove makers, bindery workers, garment workers' trades in factories, cigar box makers, elevated railroad employes, neckware trades, suspender makers and printers. No colored women are employed in dressmaking, cap making, lingerie, or corset making. The two reasons given for this non-employment by the employers are first, the refusal of the white employes to work with the colored people; second, that the "colored help" is slower and not so efficient as the white. Some employers solve the second difficulty by paying the colored help less. In the laundries, for instance, where colored people do the same work as the white, the latter average a dollar a week more.

[Sidenote: =The Field of Undesirable Occupations=]

The effect of these restrictions upon the negroes are, first, that they are crowded into undesirable and underpaid occupations. As an example, about 12 per cent of the colored men in Chicago work in saloons and pool-rooms. Second, there is a greater competition in a limited field with a consequent tendency to lower the already low wages. Third, the colored women are forced to go to work to help earn the family living; this occurs so universally as to affect the entire family and social life of the negro colony.

[Sidenote: =Pullman Company the Largest Employer of Colored Men=]

A large number of negroes are employed on the railroads, largely due to the influence of the Pullman Palace Car Company. There is a tradition among colored people that Mr. Pullman inserted a clause in his will urging the company to employ colored men on the trains whenever possible, but while the investigators found 1,849 Pullman porters living in Chicago, they counted 7,625 colored men working in saloons and pool rooms. There is also a high percentage of them employed in the theaters, more than one-fourth of all the employes in the leading theaters of Chicago being colored men.

[Sidenote: =Contrast Between Employment by Local and Federal Government=]

The Federal Government has always been a large employer of colored labor; 9 per cent of the force in all the Federal departments are negroes. In Chicago the percentage of colored men is higher. Out of a total of 8,012 men, 755 or 10.61 per cent of the whole are colored, approximately their just proportion to the population. The negroes, however, do not fare so well in local government. A study made of the city departments in Chicago showed the percentage of colored employes to be 1.87 per cent, in Cook County to be 1.88 per cent. Three colored men have also been elected as County Commissioners, and there is said to be no instance on record in Chicago of a negro office holder having betrayed his trust.

[Sidenote: =The Colored Man in Business=]

The investigators found, in regard to the colored man in business: (1) That the greater number of their enterprises are the outgrowth of domestic and personal service occupations. (2) That they are in branches of business which call for small amounts of capital and very little previous experience. There are at present in the city of Chicago, managed by colored men, twenty-three manufacturing establishments of various kinds, seventy-two barber shops, sixty-three van, moving, and storage places, fifty restaurants, thirty-four pool rooms, twenty-six real estate dealers, twenty-six tailors, twenty-five coal and wood dealers, twenty-four hair dressers, twenty-three groceries, twenty cigar venders, twelve builders and contractors, eleven undertakers, nine printing plants, and eight hotels, besides a small representation in forty-one other lines of business.

Table showing number of colored men employed by the city of Chicago:

Department of Police	83
Fire Department	11

Corporation Counsel Office	1
Health Department	22
Board of Education, not including educational employees of the Board	9
Department of Public Works	32
Board of Local Improvement	3
Mayor's Office	1
Municipal Court	1
Municipal Court--Bailiffs' Office	1
Municipal Tuberculosis Sanitarium	2
Department of Smoke Inspection	1
City Comptroller's Office	2
Public Library	23
Labor Service	100

Total colored	292
Total number employed	15,597
Percentage colored	1.87

In the colored belt on the South Side of Chicago, there are a number of business houses managed by colored people and patronized exclusively by members of their own race. There is also one bank located in a fine building of which a colored man is president and 80 per cent of the depositors white. According to the evidence confirmed by the figures of the United States census, however, there is little possibility for a colored business man to make a living solely from the patronage of his own people. The census report holds that he succeeds in business only when two-thirds of his customers are white. This affords one explanation of the fact that most of his business is of such a character that a white man is willing to patronize it--barber shops, expressing, restaurants, and other business suggesting personal service.

[Sidenote: =The Principal Business Street in the "Black Belt"=]

In a mile on State street, from No. 3000 to 3900, the investigators found 108 colored men in business, who employed 270 colored men. Of these business undertakings, twelve were saloons--most of them newly opened; twelve barber shops; seven real estate offices--only three of them ten years old; ten restaurants--five of them having been there for more than five years and two for more than ten years; six pool rooms--all recently opened; four hair dressers, and three tailors, in addition to confectioners, bakers, cleaners, decorators, dressmakers, druggists and the other miscellaneous shops usually found in a self-contained neighborhood. As ministering to the higher life, there were found in the same block three music stores, one "art" store, one piano store, two printers, and--if they may be included in such a list--a photographer and a florist. All of the latter save one have been in existence for more than five years, in sharp contrast to the

more ephemeral life of the pool rooms and saloons, only one of which has survived so long, while eleven others have changed proprietors recently. This may be partly owing to the fact that it requires very little money to run either, since both the breweries and the pool room manufacturers readily accommodate their salesmen with their goods and other fittings, and many young colored men, who have been employed in them, are ambitious themselves to become proprietors. While in a measure the decency of such a place depends upon the proprietor, he usually responds to the pressure of the large concern who is his creditor. The total amount of capital invested in the mile by the 108 colored men was found to be \$15,750. In addition to the colored men carrying on business in the mile were twenty-six Americans, seventy-nine Jews, eighteen Germans, thirteen Irishmen, ten Greeks, nine Chinamen, and six other white men whose nationality was not ascertained. Several colored women manage independent hair dressing establishments in Chicago. On State street there are two successful restaurants conducted by women; also one saloon and one florist shop; two widows of their original owners. There are a large proportion of real estate dealers among colored men, many of whom do business with white people, the negro dealer often becoming the agent for houses which the white dealers refuse to handle. Colored people are very eager to own their own homes and many of them are buying small houses, divided into two flats, living in one and collecting rent from the other. The contract system prevails in Chicago, making it possible for a man with two or three hundred dollars for the first payment to enter into a contract for the purchase of a piece of property, the deed being held by the real estate man until the purchaser pays the amount stipulated in the contract.

[Sidenote: =Four Colored Settlements in Chicago=]

As a careful study of the housing conditions of colored people made by the students of the Chicago School of Civics and Philanthropy ascertained, there are four well defined districts in which colored people have resided for a number of years--one at Englewood, one at 55th street and Lake avenue, one on the West Side, and the largest, known as the "Black Belt," which includes the old 22nd street segregated vice district. In this so-called "belt," the number of children is remarkably small, forming only a little more than one-tenth of the population, while the lodgers constitute 37 per cent of the population. The investigation made by the School of Civics showed that only 26 per cent of the houses on the South Side and 36 per cent of the houses on the West Side colored district were in good repair. Colored tenants reported that they found it impossible to persuade their landlords either to make the necessary repairs or to release them from their contracts, but that it was so hard to find places in which to live that they were forced to endure unsanitary conditions. The investigation by the School of Civics confirmed the general impression

that the rent paid by a negro is appreciably higher than that paid by any other nationality. In a flat building formerly occupied by white people, the white families paid a rent of twelve dollars for a six-room apartment for which a negro family are now paying sixteen dollars. A white family paid seventeen dollars for an apartment of seven rooms for which the negroes are now paying twenty dollars.

[Sidenote: =Real Estate and the Colored Tenant=]

The negro real estate dealer frequently offers to the owner of an apartment house which is no longer renting advantageously to white tenants cash payment for a year's lease on the property, thus guaranteeing the owner against loss, and then he fills the building with colored tenants. It is said, however, that the agent does not put out the white tenants unless he can get 10 per cent more from the colored people. By this method the negroes now occupy many large apartment buildings, but the negro real estate agents obtain the reputation of exploiting their own race.

[Sidenote: =Lodgers a Necessity=]

High rents among the colored people, as everywhere else, force the families to take in lodgers. Nearly one-third of the population in the district investigated on the South Side and nearly one-seventh of the population in the district investigated on the West Side were lodgers. While this practice is always found dangerous to family life, it is particularly so to the boys and girls of colored families, who are often obliged to live near the vice districts. To quote from the report, "The history of the social evil in Chicago is intimately connected with the colored population. Invariably the larger vice districts have been created within or near the settlements of colored people. In the past history of the city nearly every time a new vice district was created downtown or on the South Side, the colored families within the district moved in just ahead of the prostitutes."

[Sidenote: =Difficulties of Buying Property=]

When it becomes possible for the colored people of a better class to buy property in a good neighborhood, so that they may take care of their children and live respectably, there are often protest meetings among the white people in the vicinity and sometimes even riots. A striking example of the latter occurred within the past three years on the West Side of Chicago; a colored woman bought a lot near a small park, upon which she built a cottage. It was not until she moved into the completed house that the neighbors discovered that a colored family had acquired property there. They immediately began a

crusade of insults and threats. When this brought no results, a “night raid” company was organized. In the middle of the night a masked band broke into the house; told the family to keep quiet or they would be murdered; then they tore down the newly built house, destroying everything in it. This is, of course, an extreme instance, but there have been many similar to it. Quite recently at Wilmette, a suburb of Chicago, animosity against negro residents resulted in the organization of an anti-negro committee which requested the dismissal of all negroes who were employed in the town as gardeners, janitors, etc., because the necessity of housing their families depressed real estate values.

[Sidenote: =Housing of the Well-to-Do Colored People=]

The Juvenile Protective Association, as a supplement to the previous housing investigations, studied the conditions of fifty of the better homes occupied by the colored people of Chicago. Those in the so-called “black belt” in the city; those in a suburban district, and other houses situated in blocks in which only one or two colored families lived. The size of the houses varied from five to fourteen rooms, averaging eight rooms each; the conditions of the houses inside and out compared favorably with similar houses occupied by white families. Classified according to occupation, the heads of the household in nine cases were railroad porters, the next largest number were janitors, then waiters, and among them were found lawyers, physicians and clergymen. In only four instances was the woman of the house working outside the home. Only four of the homes took in lodgers, and children were found in only fifteen of the fifty families studied. The total of thirty-three children found in the fifty homes averages but two-thirds of a child for each family and but for one family--a janitor living in a ten-room house and having eight children--the average would have been but half a child for a family; confirming the statement often made that while the poorer colored people in the agricultural districts of the South, like the poor Italians in rural Italy, have very large families, when they move to the city and become more prosperous, the birth rate among colored people falls below that of the average prosperous American family.

From the homes situated in white neighborhoods, only two reported “indignation meetings when they moved in” and added “quiet now”; one other reported “no affiliation with white neighbors”; still another, “white neighbors visit in time of sickness,” and the third was able to say “neighbors friendly.” Of the ownership of the fifty homes, thirty-five were owned by colored men, twelve by white landlords and the ownership of three was not ascertained. Thirty-four of the houses were occupied by their owners.

[Sidenote: =Few Prosperous Colored Men Born in Chicago=]

In addition to the fifty families living in comfortable houses, one hundred more cases of fairly prosperous colored families were investigated. It was found that only six of the heads of these families had been born in Chicago, that seventy-seven had come from the South. All of the southern states were represented. Twenty-four of the men were from Kentucky and nineteen from Tennessee. Only six of the ninety-two men born outside of the state had been brought to Chicago as children, while seventy-one of the number had come to the city between the ages of sixteen and twenty-six. They, as well as the older men, had come hoping for better conditions, their reasons being variously put as "higher wages," "learning a trade," "to get a home," "to make big money," "to get a position," "for more freedom," "for more schooling," etc., although in nineteen cases the reason given was curiosity, an attempt doubtless to formulate the desire for adventure.

[Sidenote: =Prosperity Does Not Remove Race Prejudice=]

Of the men from the South every one had improved his condition. Those who said their condition had not improved had been formerly working in the large cities of the East or North, where living expenses were less than in Chicago; only one received lower wages in Chicago. He had earned sixteen dollars a week before coming to the city and now earns nine dollars; two said their conditions had not improved because they "had been led off by fast company." The incomes varied from \$9.00 a month to \$153.60 a month; the average wage was \$67.32 a month. Sixteen of the men owned real estate and six others had liberal bank accounts. These results probably compare favorably with one hundred white immigrants, but the colored man insists that the immigrant has the advantage for, when he learns the language of the country and adopts American ways, he gradually lives down any prejudice against him, while the colored man can never make himself acceptable to the white man and believes that he is often disliked in proportion to his prosperity.

[Sidenote: =Family Life Among the Poorer Negroes=]

In contrast to these one hundred cases of negro men who were fairly successful, one hundred cases of colored families were taken from the files of the Juvenile Protective Association representing, of course, as do the white families whose names are on the records of the Association, people who were unable to adequately protect their children. These cases, however, proved to be typical in so far as the occupations of the men were confined to very few lines of activity. Forty-five of them were porters, sixteen janitors, thirteen laborers, the rest scattered in different kinds of work--teamsters, waiters, cooks, musicians, etc. The striking difference between them and the more prosperous families lay in the fact that the women were obliged to

work. Of the women in these families, only fourteen stayed at home; of the others, twenty-six were day workers in households; twelve worked in laundries; seven were prostitutes; the others worked at various occupations; two were hairdressers; one a music teacher, etc. Of the one hundred families, thirty were self supporting; sixteen did not support their families at all, while fifty-four were dependent on outside assistance. In regard to their family status, sixty-six lived an unbroken family life; in twenty-one cases the husband and wife were separated; seven women were deserted; there were three cases of illegal relationship. Out of the one hundred cases, there were seven inter-marriages; in two instances white men had married colored women; in five instances white women had married colored men.

[Sidenote: =86 Mothers Out of 100 Go Out to Work=]

Out of the one hundred poor families taken from the Juvenile Protective Association records, it was found that eighty-six of the women went out to work and, while there is no doubt that this number is abnormally high, it is always easier for a colored woman to find work than it is for a colored man, partly because white people have the traditions of colored servants and partly because there is a steadier demand and a smaller supply of household workers, wash and scrub women, than there is of the kind of unskilled work done by men. Even here colored people are discriminated against, and although many are employed in highly respectable families, there is a tendency to engage them in low-class hotels and other places where white women do not care to go.

[Sidenote: =Percentage of Colored Women Working=]

No figures are available later than 1900, but in a governmental report made then, the colored women in Chicago constituted 42.5 per cent of the bread-winners of their race, slightly lower than the 43.2 per cent given in the census report for the entire United States. This is more than double the proportion of white women employed, which the census gives as 20.6 per cent of the entire white population. Only .04 per cent of working white women are married.

[Sidenote: =School Irregularity Common Among Colored Children=]

As 60 per cent of negro working women over sixteen years of age are married, there is no doubt that many colored children are neglected. Investigators found from consultation with the principals of the schools largely attended by colored children that they are irregular in attendance and often tardy; that they are eager to leave school at an early age, although in one school where there is a great deal of manual work this tendency is less pronounced. Colored children, more

than any others, are kept at home to care for younger members of the family while the mother is away at work. A very persistent violation of the compulsory education law recently tried in the Municipal Court disclosed the fact that a colored brother and sister were alternately kept out of school to care for the younger children, who had been refused admittance in a day nursery, that the old woman who cared for the little household for twenty-five cents a day was ill and that the mother had been obliged to keep the older children at home in order to retain her place in a laundry. At the very best the school attendance of her five children had been most unsatisfactory, for she left home every morning at half-past six and the illiterate old woman took little interest in school. The lack of home discipline perhaps accounts for the indifference to all school interests on the part of many colored children, although this complaint is not made of those in the high schools who come from more prosperous families. The most striking difference in the health of the colored children compared to that of the white children in the same neighborhood was the larger proportion of the cases of rickets, due, of course, to malnutrition and neglect. The colored people themselves believe the school authorities are more interested in a school whose patronage is predominantly white.

[Sidenote: =No Congenial Employment for Refined Girls=]

It was found that young colored girls, like the boys, often become desperately discouraged in their efforts to find employment. High school girls of refined appearance, after looking for weeks, will find nothing open to them in department stores, office buildings, or manufacturing establishments, save a few positions as maids in the women's waiting rooms. Such girls find it continually assumed by the employment agencies to whom they apply for positions that they are willing to serve as domestics in low class hotels and disreputable houses. Of course, the agency does not explain the character of the place to which the girl is sent, but on going to one address after another she finds that they are all of this kind. Quite recently an intelligent colored girl who had kept a careful record of her experiences with three employment agencies came to the office of the Juvenile Protective Association to see what might be done to protect colored girls less experienced and self-reliant than herself, against similar temptations. Quite recently a young colored girl who at the age of fifteen had been sent to a house of prostitution by an employment agency, was rescued from the house, treated in a hospital and sent to her sister in a western state. She there married a respectable man and is now living in a little home "almost paid for."

The case of Eliza M., who has worked as a cook in a disreputable house for ten years is that of a woman forced into vicious surroundings. In addition to her wages of five dollars a week and food, which she is permitted to take home every evening to her family, she has been able

to save her generous “tips” for the education of her three children, for whom she is very ambitious.

[Sidenote: =Insults to Girls Common=]

Colored young women who are manicurists and hairdressers find it continually assumed that they will be willing to go to hotels under compromising conditions, and when a decent girl refuses to go, she is told that that is all that she can expect. There is no doubt that the few colored girls who find positions as stenographers or bookkeepers are much more open to insult than white girls in similar positions.

All these experiences tend to discourage the young people from that “education” which their parents so eagerly desire for them and also makes it extremely difficult for them to maintain their standards of self-respect.

[Sidenote: =Life Insurance Popular=]

It was found that colored people in Chicago do not patronize these life insurance companies so successfully managed by colored men in Atlanta and in other cities. The investigators, however, found many colored agents employed as solicitors among their own people; two hundred colored agents, for instance, are writing policies for accident insurance companies. The Metropolitan Life Insurance Company alone has approximately 65,000 industrial policies on the lives of colored people in the city of Chicago, many colored people having more than one policy on every member of the family.

[Sidenote: =Many Professional Men of High Standard=]

Chicago has a large number of fine negro professional men; this is due largely to the number of schools and universities accessible to the negro’s use. There are in Chicago sixty-five colored physicians, four of whom are women; twenty-five lawyers; eighteen dentists; twelve pharmacists, with many students in attendance at the universities and professional schools. One of the physicians is on the staff of St. Luke’s hospital and others are responsible for the fine medical work carried on at the Provident Hospital, the leading hospital for colored people in the United States. The colored people are justly proud of this hospital, founded in 1891, where there is no discrimination between white and colored people, on the staff of physicians and nurses, nor among the patients. The hospital is managed by a board of trustees of fourteen members--six white and eight colored, and has a good standing among the hospitals of Chicago. Although colored women have an aptitude for nursing, there are not enough training schools in

the country where they can be properly trained as nurses, such as the Provident Hospital in Chicago; the Freedmen's Hospital in Washington, D. C.; the Lincoln Hospital in New York, and one in Philadelphia. One of the colored dentists of Chicago is a leader in his profession. His practice is exclusively among white people. Two colored dentists are women. Several of the colored lawyers have been in the State's Attorney's office, one of them an assistant there from 1896 to 1911, was most active in bettering conditions for the juvenile offenders; still another colored man was District United States Attorney for some years, and several negro lawyers have been admitted to Supreme Court practice. One of the prominent colored lawyers who was for five years head of the department of the city damage suits, has become a specialist in "track elevation suits" with big corporations as his clients.

[Sidenote: =Physicians and Lawyers Real Factors in Social Improvement=]

The colored people often state that the colored professional men, lawyers and physicians, rather than the ministers and social workers, have been the real factors in the social improvement among the negroes of Chicago. They instance that the Frederick Douglass Center has staunch supporters among the professional men; that the president of their newly built Y. M. C. A. is a colored physician and that professional men are very active in the Chicago branch of the National Association for the Advancement of Colored People.

[Sidenote: =Musicians of Prominence=]

Among the many colored musicians in Chicago are at least a score who may be called professionals; two of them direct orchestras; one is a pianist of local reputation; at least four of them singing in vaudeville are also composers of songs; two are young colored women who have extensively traveled as singers in Cuba and South America as well as in the United States. Every year several young people graduate at the various musical colleges, and a gifted young violinist is now studying in Paris. The Art Institute often has colored students, and there are a goodly number of colored people who write creditable poetry, chiefly words to songs which are set to music by their friends. Four newspapers edited in Chicago by colored men, as well as contributions to the "Crisis" and other magazines, give evidence of a remarkable ability for writing. In addition to several clergymen and attorneys of undoubted forensic ability, may be cited several lecturers, one of them a woman with a gift for public speaking, who years ago roused interest throughout England in the condition of colored people.

[Sidenote: =Church Chief Factor in Social Life=]

The church among the colored people has always been the chief factor in their social life. In Chicago there are twenty-nine regularly organized churches in addition to various missions, with approximately twenty thousand members. This includes nearly half of the colored population of the city, a much larger proportion than the church membership among the white population. The churches own property to the amount of six hundred thousand dollars, although every church is carrying a debt. The church is a center for the colored people for lectures, literary societies, civic meetings, and so forth. Many churches have young people's societies, meeting every Sunday afternoon, united to the extent of sustaining in Chicago an annual oratorical contest to which they all send representatives. Two of the churches, one on the South Side and one on the West Side, at one time carried on institutional work, which has been discontinued because of lack of funds; one of the Baptist churches supports a religious training school which has eleven teachers and one hundred and fifty students. The clergymen are, as a rule, men who have been educated in some of the best northern and southern theological seminaries, but they are inclined to be sectarian and to confine themselves to the conventional church routine. The colored ministers of one denomination seldom meet with the colored ministers of another denomination and almost never with the white ministers of their own denomination. They complain that they meet with public approval when they work for the religious advancement of their own race, but are rebuffed when they enter into general movements for civic betterment.

[Sidenote: =Young Men's Christian Association=]

A Young Men's Christian Association building in Chicago represents the largest investment ever made by that association to be devoted to the interests of colored men and boys. Its entire cost approximates \$195,000. It contains the standard equipment of gymnasium, restaurant, dormitories, etc., and has a membership of 2,000, although the annual fee is ten dollars.

[Sidenote: =Juvenile Officers and Social Workers=]

Among the colored social workers of the city are five Juvenile Protection Officers and one Adult Probation Officer. The county agent employed one colored investigator and the Juvenile Protective Association one colored officer; there are three colored nurses employed by the Visiting Nurses' Association, and three others upon the staff of the public school nurses. The standard of all these social workers is as high as the average, and several of them--notably two young women living at the Wendell Phillips Settlement, have taken the

full course at the Chicago School of Civics and Philanthropy. The colored people themselves feel that there is urgent need for more trained social workers. The clubs of colored women which are beginning to study the social needs of their districts urge their members to more serious study; of these clubs the Civic Club is devoted to rescue work, the Phyllis Wheatley Club to maintaining a permanent home for colored working girls, the Parents' School Club to securing better school conditions, a Neighborhood Club to making local improvements. Several other women's clubs, which take care of special cases in need of relief and co-operate with the United Charities, are eager for guidance as to the best method of Charitable administration. There are forty-one clubs of colored women in the city, with a total membership of 1,200, most of them devoted to philanthropy and closely allied to the women's aid societies found in all the colored churches. Two clubs for colored women are of a somewhat different character, federated with the Cook County League of Women's Clubs and co-operate in general social movements.

[Sidenote: =Social Settlements=]

There are four settlements in Chicago in or near the neighborhoods of colored people. The pioneer was the Frederick Douglass Center on the South Side of Chicago, founded to promote a better understanding between white and colored people and to help remove the arbitrary disabilities from which the latter suffer in their civil, political and industrial life. The founder and head resident, who had for years been troubled by the increasing race antagonism against the colored people, believes that much can be accomplished by a frank discussion of the situation between the two races if it be carried on with justice and good will; cases of unusual discrimination are often arbitrated and adjusted.

The Wendell Phillips settlement was also organized by a board of white and colored people who were concerned over the conditions obtaining in the colored district on the West Side of the city. Two young colored women, graduates of Fiske University, are in charge and have developed an excellent system of clubs and classes. Both of these settlements own their own property.

The Negro Fellowship League was founded as an outgrowth of the discussion following the Springfield riots, when it was said that the difficulty arose from idle young men out of work, maintains a reading room, a lodging house, and an employment agency on State street in the midst of the "Black Belt." The League performs many offices for the colored men who have newly arrived in Chicago similar to those of the League for the Protection of Immigrants; in fact, the needs of the two classes of people are similar in many respects, implying lack of adjustment rather than lack of ability.

* * * *

The Enterprise Institute on State street has classes in various lines, at present numbering 150 pupils. There are in Chicago an entire group of institutions which have arisen as colored people were discriminated against in existing institutions, such as the Home for the Widows of Colored Soldiers and the Home for the Aged, all supported by associations of colored women.

[Sidenote: =Race Prejudice Found Even in Day Nurseries and Dependent Homes=]

A day nursery for colored children was organized a year ago because several day nurseries refused to receive colored children on the ground that "the other people objected to them." There are likewise five homes for colored dependent children; two were the outgrowths of apparent discrimination against colored children in two state industrial schools receiving public funds, although in the case of the Illinois Industrial School for Girls, situated at Park Ridge, Illinois, the Institution is responsible for the branch maintained in Chicago for colored girls and defrays all expenses. The board managers believe that this segregation is equally valuable to both sets of children. The similar school for boys at Glenwood, Illinois, does not maintain a separate branch, but in various ways avoids taking colored boys into the school. At the time of the investigation, the Glenwood School contained 500 white boys and fifteen colored boys, a number disproportionate to the cases of colored boys brought into the Juvenile Court. It is becoming a custom, on the part of many places, to refuse colored children, with the cryptic utterance, "We have no room."

In order to provide for dependent and delinquent colored children, a colored workman, previously a probation officer, established the Louise Juvenile Home, which cares for twenty dependent boys. The Eldridge Home and the Marcy Home each provides for smaller children. The Amanda Smith Home was founded by an ex-slave with a remarkable gift for public speaking and great religious devotion. She spent twelve years in China, Japan and Africa under the auspices of the English Missionary and Temperance Society. Returning home to Chicago in 1900, she invested the savings of her lifetime, ten thousand dollars, in the Home, which is chartered under the provision of the industrial school act. The Home cares for fifty children, but since Mrs. Smith left, on account of ill health, it has been greatly crippled for lack of funds. All of these homes for colored children are supported wholly by colored people. The Illinois Technical School for colored girls is maintained in Chicago by the Catholic Church; there are fifty-one girls in the school, ranging from four to sixteen years of age and receiving most excellent care. In spite of these various efforts, the care for dependent and

semi-delinquent colored children is totally inadequate, a situation which is the more remarkable as the public records all give a high percentage of negro criminals; the police department gives 7.7 per cent; the Juvenile Court 6.5 per cent; the county jail 10 per cent.

* * * * *

Those familiar with the police and the courts believe that negroes are often arrested on excuses too flimsy to hold a white man; that any negro who happens to be near the scene of a crime or disorder is promptly arrested and often convicted on evidence upon which a white man would be discharged. The Juvenile Protective Association has on record cases in which negroes have been arrested without sufficient cause and convicted on inadequate evidence, and it is well known that a certain type of policeman, juryman, and prosecuting attorney have apparently no scruples in sending "a nigger up the road" on mere suspicion.

[Sidenote: =Negroes Frequently Convicted on Suspicion=]

To take one record from the files of the Association, the case of George W., a colored boy, nineteen years old, who was born in Chicago and had attended the public schools through one year at the high school. He lived with his mother and had worked steadily for three years as a porter in a large grocery store, until August 22, 1912, when he was arrested on the charge of rape. On the late afternoon of that day an old woman of eighty-three was assaulted by a negro and was saved from the horrible attack only by the timely arrival of her daughter, who so frightened the assailant that he jumped out of a window. Two days later George was arrested, charged with the crime. At the police station he was not allowed to sleep; was beaten, cuffed and kicked, and finally, battered and frightened, he confessed that he had committed the crime. When he appeared in court, his lawyer advised him to plead guilty, although the boy explained that he had not committed the crime and had confessed simply because he was forced to do so. The evidence against him was so flimsy that the judge referred to it in his instructions to the jury. The State's Attorney had failed to establish the ownership of the cap dropped by the fleeing assailant and the time of the attempted act was changed during the testimony. Though the description given by the people who saw the colored man running away did not agree with George's appearance, nevertheless the jury brought in a verdict of guilty and the judge sentenced the boy to fourteen years in the penitentiary. When one of the men who had seen the guilty man running away from the old woman's house was asked why he did not make his testimony more explicit, he replied, "Oh, well, he's only a nigger anyway." The case was brought to the Juvenile Protective Association by the employer of George W., who, convinced of the boy's good character, felt that he had not had a fair trial. The Association

found that the boy could absolutely prove an alibi at the time of the crime and is making an effort to get him out of the penitentiary.

[Sidenote: =A Man's Fate Decided in Sixteen Minutes=]

Occasionally it happens that very little time is given to a case where a negro is concerned.

Some time ago a colored man was arrested and charged with murder. He pleaded guilty and was sentenced by the judge to imprisonment for life in the penitentiary. It took just sixteen minutes from the time the negro was brought into the court to the time he left it, to have his case brought up, to plead guilty and to have a sentence of lifelong imprisonment pronounced. It surely seems as if such a serious crime as the taking of life and the commitment of a man to prison for as long as he lives, should at least require less haste and more mature deliberation.

[Sidenote: =Economic Condition Largest Factor in Production of Crime=]

The reasons given by the leading colored men of Chicago for the large amount of crime among their people are curiously confirmed by the results of this investigation. They contend that first, the negroes in Chicago are so limited in the choice of employment that they under-bid each other and are forced to work for the smallest wages. This obliges the wife and mother to go out to work and the consequent neglect of the children leads to truancy, incorrigibility and crime. Second, that the colored people of Chicago are obliged to pay such a high rental that a large number of families are forced to take in lodgers, which results in much immorality and indecency among colored people who would otherwise remain respectable. Third, that the colored people are forced to make their homes in and near the openly immoral districts of the city so that the only white people many colored children ever see are those frequenting the vice district. Fourth, the disproportionate number of negro criminals is due to the fact that their desire for the friendship and sympathy of the white people is often exploited by white criminals who wish to secure shelter from the police. Some obscure colored family, happy to render a service to a white man, takes him in sometimes for weeks or months, and he naturally influences the colored men with whom he associates.

[Sidenote: =Remedies Suggested=]

As remedies against the unjust discrimination against the colored man suspected of crime, a leading attorney of the race in Chicago suggests:

(a) Generalizing against the negro should cease; the fact that one

negro is bad should not fix criminality upon the race. The race should be judged by its best as well as by its worst types. (b) The public press never associates the nationality of a criminal so markedly in its account of crime as in the case of a negro. This exception is most unjust and harmful and should not obtain. (c) The negro should not be made the universal "scapegoat." When a crime is committed, the slightest pretext starts the rumor of a "negro suspect" and flaming headlines prejudice the public mind long after the white criminal is found.

The colored man complains of race prejudice exhibited first in the readiness to condemn the untried negro as a criminal; second, in the refusal to give him employment fitted to his skill and capacity; third, in crowding the colored population into the most undesirable houses in the city. He does not resent social ostracism, but he does make a vigorous demand for his civil and economic rights.

In order to test the many times repeated statement that colored people are discriminated against at public cafes, a young colored woman, at the request of the investigators, visited sixteen of the leading confectioners of Chicago in the most crowded portion of the city, asking to be served with a cup of hot chocolate. In every place she was served, always by white men or women, and the white patrons seated at adjoining tables paid no attention to her presence. At one place, however, she was obliged to wait for a long time, but was finally served without remark. At another place, after waiting for twenty minutes, she was asked to take a seat at the counter and told that white people would not sit at the same table with her. At two other places she fancied that she was made fun of by the waiters, but in none of the places did she encounter actual rudeness. Possibly this treatment would not have been accorded to her at the hotels. Quite recently the County Federation of women's clubs arranged a luncheon at one of the leading hotels of the city. When the proprietor objected to the presence of the colored delegates, the officers of the federation gave up the luncheon rather than to countenance such discrimination, although the objection was made so late that a committee was obliged to stand at the door of the hotel to tell the members that the luncheon had been given up and the program postponed. Naturally some of the delegates objected, but the large majority approved the action of the officers in spite of the great inconvenience involved.

[Sidenote: =Colored People Especially Fond of Music=]

All colored people are especially fond of music, but almost the only outlet the young people find for their musical facility is in vaudeville shows, amusement parks and inferior types of theaters. That which should be a great source of inspiration tends to pull them down, as their love of pleasure, lacking innocent expression, draws them

toward the vice district, where alone the color line disappears.

[Sidenote: =Model Dance Hall Opposed by White People=]

An effort was recently made by some colored people on the South Side to start a model dance hall. The white people of the vicinity, assuming that it would be an objectionable place, successfully opposed it as a public nuisance and this effort toward better recreation facilities had to be abandoned.

[Sidenote: =Colored Boys Cannot Bathe in Lake Michigan=]

Even the waters of Lake Michigan are not available for colored children. They are not welcomed by the white children at the bathing beaches and late last summer one little colored boy who attempted to bathe at the Thirty-ninth street beach was mobbed and treated so roughly that the police were obliged to send in a riot call.

This investigation would certainly explain the presence of so large a proportion of colored boys in the county jail on the following grounds: First, the colored children are forced to live in the very worst neighborhoods in Chicago and even there the colored families are charged such high rents that the house is filled with "floaters" of a very undesirable class, so that the children witness all kinds of offenses against decency within the house as well as on the streets.

Second, the fathers of the families, because they are so circumscribed in their lines of occupation, work for very small wages, with the inevitable outcome that the mothers go out to work and neglect their children. As a result, the colored children are underfed, irregular in school attendance, make slow progress in their studies and drop out of school at the earliest possible moment.

Third, there are not enough places in Chicago where negro children may find wholesome amusement. Of the fifteen small parks and playgrounds with field houses, only two are really utilized by colored children.

They avoid the others because of friction and difficulty which they constantly encountered with the white children. The commercial amusements found in the neighborhoods of colored people are of the lowest type of pool rooms and saloons, which are artificially numerous because so many young colored men find their first employment in these two occupations and with their experience and very little capital are able to open places for themselves.

Perhaps the greatest factor of all is the difficulty which all colored people have in finding employment; and after an ambitious boy has

been refused employment again and again in the larger mercantile and industrial establishments and comes to the conclusion that there is no use in trying to get a decent job, he is in a very dangerous state of mind. Idle and discouraged, his neighborhood environments vicious, such a boy quickly shows the first symptoms of delinquency and the remedial agencies which should be prompt in his case are the very weakest at this point. Added to this is the conviction held by many colored boys and young men that "the police have it in for them and do not accord them fair treatment."

In suggesting remedies for this state of affairs, the broken family life, the surrounding of a vicious neighborhood, the dearth of adequate employment, the lack of preventive institutional care and proper recreation for negro youth, the Juvenile Protection Association finds itself confronted with the situation stated at the beginning of the investigation, that the life of the colored boy and girl is so circumscribed on every hand by race limitations that they can be helped only insofar as the entire colored reputation in Chicago is understood and fairly treated.

For many years Chicago, keeping to the tradition of its early history, had the reputation among colored people of according them fair treatment. Even now it is free from the outward signs of "segregation," but unless the city realizes more fully than it does at present the great injustice which discrimination against any class of citizens entails, we shall suffer for our indifference by an ever increasing number of idle and criminal youth, which must eventually vitiate both the black and white citizenship of Chicago.

PRESS OF ROGERS & HALL CO., CHICAGO

TRANSCRIBER'S NOTES:

Emboldened text is surrounded by equals signs: =bold=.

Obvious typographical errors have been corrected.

Alternate or archaic spelling that may have been in use at the time of publication has been retained.

End of the Project Gutenberg EBook of *The Colored People of Chicago*, by
A. P. Drucker and Sophia Boaz and A. L. Harris and Miriam Schaffner

Random Knowledge Vol 11 is a Creative Commons Non-Commercial copyrighted project by Matt Pierard, 2019